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Grammar Stories:

A proposal for the storification of grammar rules

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Tutor

Giuliana Dettori

Simone Torsani

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Introduction

This thesis proposes a procedure to transform abstract concepts into meaningful stories and evaluates its application to grammar rules in two contexts of English learnt as foreign language by Italians: as online resources available to adult independent learners, and as learning activity carried out in school. In the first case, users are passive receivers of the content produced with the procedure; in the second case, learners actively apply it while working on grammar rules. In both situations, the present research study aims to evaluate if the delivery of abstract information in story-form facilitates its understanding and memorization.

This thesis, however, is also a journey which lasted three years.

It started in November 2013, with the admission into the Digital Humanities PhD program of the University of Genoa. The research project I¹ proposed was aimed at developing a playful and narrative digital tool to help people learn English. My previous studies and my experiences as a teacher had convinced me of the value of games and stories for learning: the combination of the two looked like the Holy Grail of teaching to me.

While deepening the theoretical background necessary to realize my idea, I ended up refining my initial plan, abandoning the idea of the video-game in favour of a simpler tool apt to help Italian adult independent learners of English as a foreign language. This certainly was influenced not only by the literature, but also, and especially, by observing many of my friends struggling with speaking correct English, a situation which is shared with too many Italians. I therefore decided I needed more information on this issue. As suggested by Design Thinking, the first thing to do was framing the problem, understanding its peculiarities, and identifying the needs of my prospective users. I was surprised to note that almost all of them, even the most skilled ones or those who had been living abroad, were prone to very basic mistakes. Most of them confessed to talk and write English as if they were “playing by ear”. The problem with such behaviour is that their native language, Italian, was interfering with the foreign language and leading them to use incorrect forms. They said they remembered grammar rules vaguely and would not rely too much on them. They also did not want to spend time studying on books to learn things they felt they “knew already”: they seemed to be irritated by lengthy and abstract explanations.

¹ The introduction is written in first person, because it consists mainly in the telling of my individual journey. In the rest of the thesis I will turn to the use of “we”.

In order to help them – and the many Italian learners in a similar situation - I decided to focus on one specific, concrete problem: I decided to work on common mistakes of Italian speakers of English and concentrated on a book that highlighted them (Swan, Smith, 2001).

As a pedagogical approach, I decided to focus on narrative learning. My previous research in storytelling and my experiences with it in real life had convinced me of the communication power of stories. Good storytelling works with any age, any background, any topic. In fact, it has been used for teaching since the dawn of time, as I had discovered during the year I spent in Australia teaching Italian as a Foreign Language at high-school level. It was while visiting Uluru, the most sacred of the Aboriginal mountains, that I found that its lower part is completely covered by drawings that were used by the elders to tell stories to the kids and educate them about Life. I was thrilled by the idea of exploring new digital forms of storytelling that would perpetuate its role in learning.

For the issue I wanted to address, however, a level of difficulty was introduced by the fact that grammar rules are abstract concepts, and therefore they cannot be straightforwardly expressed in story form. Moreover, I knew it was not enough to produce some videos presenting a story, but rather to find a “formula” apt to transform grammar rules, and possibly any other abstract concept, into stories. The narrativization of abstract concepts has been discussed for quite some time by academics of different backgrounds, but a replicable procedure that could work in a variety of cases was still missing.

It took several months and many readings to find a way to standardize the process. By February 2016 I had created the first prototype of Grammar Story, working on a mistake that is very common among Italians: the missing -s at the end of Present Tense verbs at the third singular person. The story was titled “Speed Dating”. By the end of the year, the first version of what I called “storification procedure” was ready. Between February and March, I wrote, scripted, produced, edited five other Grammar Stories, further refining the procedure during the process.

My intention was to define a procedure people could use to create effective learning material (education professionals, designers of multimedia learning material and e-learning platforms, publishing houses, ...), but in the meanwhile I realised there were other people who could benefit from the storification procedure: students and teachers. The procedure could be used by teachers to create material for their students, but also as class activity to be carried out *with* and *by* the students, in which they would be guided to produce their own stories. This possibility was worth being explored as well.

As soon as my Grammar Stories were ready, I created a website to experiment them with independent adult learners, and at the same time I started sending a proposal for a Grammar Stories workshop to

schools. Thanks to a keen English teacher, I was able to do a first exploratory trial in June 2017. The experience helped me understand what needed to be adjusted, and in the Fall I repeated the experiment in three schools.

This thesis is the detailed report of this learning journey. Chapter 1 provides the Theoretical Framework for this study; it constitutes the foundation of my proposal and it is the result of extensive readings on storytelling and multimedia technology in learning context. Chapter 2 describes the storification procedure and its development. Chapter 3 illustrates the methodology for the experimentation and frames it in the context of language learning theory. Chapter 4 reports Experiment A, carried out with adult independent learners who were using the 6 Grammar stories produced. Chapter 5 describes the first field trial realised in schools on June 2017, while Chapter 6 reports on the multiple trials run in Fall 2017; all together they constitute Experiment B. Lastly, Chapter 7 draws some conclusion from this experience.

I decided to devote this introduction to talking about the journey of this study for two reasons: the first is that I believe in storytelling as a most powerful communication tool, and it would be contradictory not to present it in form of story; the second is that these three years were not an easy journey. It took time to develop each part of this project, it was necessary to repeatedly explore, compare, analyse and check, but it surely was a journey where much was learnt.

Before starting, some terminological clarifications are needed. In this work, “storytelling” is intended as the telling of stories which have a beginning, a development, and an end. “Narrate” is the action of delivering information in the form of a story or anyway in narrative form. It was decided to call the procedure a “*storification* procedure” because it aims to create stories with a beginning, a development (often including a conflict) and an end.

Most of the studies on storytelling start with a definition of what is intended with "story". Instead of providing a rigid definition, I decided to identify some structural features of stories, and they are described in Section 1.2.

It is now time to begin our journey.

Chapter 1.

THEORETICAL FRAMEWORK

In this chapter we provide reasons for considering storytelling a powerful tool for teaching and learning, especially if combined with a digital multimedia input like videos. Since storytelling relates to the content, and video to the container, more focus is put on the first than on the second.

Storytelling has played a role in human society since its beginning (Section 1.1) and the connection humans had with it has been so constant and long that they have developed an instinct for applying story structure (Section 1.2) to their thoughts. The fact that human thinking is story-based implies that an input in story-form is easy to process (Section 1.3) and facilitates memory (Section 1.4). Visuals too play a big part in our thought and memory processes (Section 1.5).

Storytelling has been used as educational tool for centuries and is still used as such (Section 1.6) because it facilitates learning in several ways (Section 1.7). Videos too help learning (Section 1.8), and the best results can come when the two are put together (and in Chapter 2 we will consider a proposal that goes exactly in that direction).

1.1 The role of storytelling in human society

In the description of human evolution, another stage should be added after the *homo erectus*: the *homo fictus* (Gottschall, 2012). As a species, we are addicted to story, and storytelling is among the top human traits that are universal across culture and throughout all of known history (Brown, 1991; Hsu, 2008).

Evidence of folktales can be found in all types of societies, everywhere people weave stories, and they have been doing it since the dawn of human civilization. One of the most accredited theories on the origin of cave paintings is that they were used as a support during rituals involving the first form of storytelling: the tribe shaman would point at the paintings and mimic gestures, probably emitting sounds, in order to deliver a message to the members of the community gathered around him/her (Hilliard, 2004).

Familiarisation with fire, led human communities to develop the habit to gather at night and tell stories to each other (Wiessner, 2014). Those stories would start as reports of personal experiences and convey precious information for survival. If one member succeeded in escaping a danger, the recollection of the event would share with the others the information needed to do the same. As the

stories were told and re-told, they would start to have a life of their own, no longer linked to the original teller. Being the main vehicle of information, storytelling became a key element for the evolution of our species. Moreover, because they provided a sense of meaning and fostered social bonds, stories also became a source of entertainment.

Centuries passed, and the tradition of oral storytelling continued: in Ancient Greece, shamans were substituted by ἀοιδοί (aoidòi), and in Ancient Rome by *vates* and *aretalogi* (Zampolli, 2017).

Alphabets had been in use since VIII b.C., the first “romances” date back to V b.C., but for many centuries reading and writing skills were considered only from a utilitarian point of view and delegated to servants. Stories were still told orally.

Then, in the Middle Ages, noble or rich people started to understand the utility of being literate and began to learn how to read and write. High-class people progressively got into the habit of reading aloud stories in their homes, while common folks would keep on telling them orally in their houses. All of them would enjoy jokers and travellers telling stories in the squares.

Over the following centuries, despite the raising of literacy and the diffusion of books, folk stories kept their place in human communities, passing from mouth to mouth, changing, evolving, always carrying deep moral meaning with them and shaping the communities they belonged to.

During Romanticism, there was a renewal of interest towards all folk culture. Fine literates, like the Grimm brothers, decided to travel from one village to the other and collect traditional stories. For folk stories it was the beginning of a process of crystallization.

Meanwhile a new form of fiction, the novel, was born, more and more people got access to education, books became cheaper because of the constant innovations in the publishing industry. All this made people increasingly shifting towards books to satiate their hunger for stories.

After came the cinema, invented and marketed at the end of the XIX century; then, in the first half of the XX century, radio and television, and later the Internet, allowing the birth of transmedia and cross media storytelling, interactive storytelling, etc. New technologies led also to the addition of Virtual Reality storytelling.

Despite the abundance of opportunities made available by digital platforms and tools, oral storytelling is not dead and is currently living a “revival”, with associations all around the world working for its preservation (Zampolli, 2017). Folk stories are part of the repertoire of the modern performative storytellers but have also been an endless source of inspiration for movies, books, videogames and other pop-culture artefacts. Fairy-tale characters, who have functioned for centuries as archetypes, are now invested of a psychological identity (Warner, 2014), often distorting the original message.

Those who complain about the death of stories (Shields, 2010) take into consideration paper books only. If we look at the world around us, we can see stories are well and alive. People are addicted to Netflix series as Romantics were addicted to modern novels in the XIX century. New ways of living stories are becoming more and more popular: both in the real world, with storytelling board or card games like “Once upon a time”, role playing games like “Dungeons and Dragons”, LARPs (Live Action Role Play), and in the virtual world with MMORPs (Massive Multiplayer Online Role Play) like “War of Warcraft”. It is evident that, in comparison to previous decades, a large number of people are now not only beneficiaries of stories but also makers.

People’s attraction towards stories is so strong and evident that the business world has specialised to exploit it in order to market products (Edson Escalas, 2007) and in general improve companies’ strategies of communication (Gargiulo, 2005). “Corporate storytelling” is one of the most talked about tools in business nowadays.

Andrea Fontana, one of its main experts in Italy, talks of “storytelling”² as a process which designs, analyses, builds, governs the identities and relation of enterprises through the application of storytelling techniques both online and offline (Fontana, 2016). However, the power of stories is being applied in communication also for other purposes, like education and increasing awareness about social issues.

Why are we the only species who developed storytelling skills? The answer probably lies in language. Other species developed a communication system, but not one as sophisticated as human language, and it was language which opened the door to the world of stories, “because language is not merely a mode of communication, it is also the outward expression of an unusual mode of thought: symbolic representation” (Deacon, 1997:22).

Human instinct is fuelled by the desire of surviving and avoiding death, therefore humans crave food, sex, shelter (survival of the body, reproduction, safety); however, and quite surprisingly, they also crave stories (Gottschall, 2012). Since evolution is ruthlessly utilitarian, fiction seems like a luxury that should not last in human life, but this is not the case. This mystery is often referred to as “the riddle of fiction” (Gottschall, 2012).

One of the first attempts at explaining it was made by Charles Darwin who hypothesized stories played a role in sexual selection (Darwin, 1871), as a way for the male to get sex by the female by making a display of his intellectual skills. This hypothesis, however, has long been surpassed.

² Fontana’s books deal with “corporate storytelling”, but their titles often use only the word “storytelling” (*Manuale di storytelling - Storytelling Manual*, 2009; *Siamo tutti storytellers - We are all storytellers*, 2014). This has contributed to Italians’ recurrent use of this word alone to refer to its corporate application.

A second possible answer is that evolution did not get rid of stories because it would have meant getting rid of a handy source of pleasant feelings³. If we settle for this explanation, we would expect stories to be full of positive emotions and joyful events that make us feel good, but this is not the case. If we look at the traditional stories that have been passed down in oral traditions, we see they are full of dark aspects: murders, adversities, monsters, fear, death.

It is possible to make sense of this if we consider a third possible answer: stories are not much focused on joy, but rather deal with struggle. They are not “a playground for the mind” (Boyd, 2009), but a *training* ground, where we learn how to face Life. In other words, stories are a source of vicarious experience. Through stories we get to learn from the experience of others. When stories are fostered in a community, and are shared again and again, they become educational tools, they carry information inside them.

We said that stories trigger the release of chemicals that make us feel good and make us lose ourselves in them. That feeling comes from a surge of the dopamine neurotransmitter, the hook that paralyzes us and makes the real world fade away so that we can focus on the story, as if the brain was urging us to follow our curiosity and find out how the story ends, so as we can learn something that we need to know (Cron, 2012). “We don’t turn to stories to escape reality. We turn to stories to navigate reality” says Lisa Cron, in her TED Talk⁴ about storytelling and the brain (Cron, 2014).

In other words, stories attract *in order* to instruct. “Through stories we learn about human culture and psychology, without the potentially staggering costs of having to gain this experience first-hand” (Gottschall, 2012). Practice is key to avoid mistakes: stories is where people go practice the key skills of human life (Burroway, 2003; Sugiyama, 2005; Boyd, 2009; Gottschall, 2012).

This is why several researchers have compared story to a “simulator” (Pinker, 1997; Oatley, 2002; Gottschall, 2012). This “simulating” function is made possible by the mirror-neurons (Rizzolati, Fogassi, Gallese, 2006) which make our brain react to the telling of the experience as it would do if the experience was real and lived in first-person. “When we read or hear a story, our brains are partly reacting as though we are experiencing the story ourselves” (Weinschenk, 2009:114) also on a physical level. When a character experiences an emotion, we feel it too (Krendl, Macrae, Kelley, Fugelsang, Heatherton, 2006). When a character performs a certain action, our brain activates as if we were also performing it (Reeves, Naas, 2003).

³ Stories make us feel good: when we watch a movie or hear a story with sex, violence, action in it, our brain reacts by producing the same chemicals it would produce if we were really living that situation. In addition, stories remind us of the feeling of being taken care of: usually the first contact with stories happens during childhood, when children are read or told a story by one of their parents, often before going to bed; it is a moment of emotional connection, invested with a positive sense of safety and love, that adults renew every time they find themselves in front of a story (Willis, 2017).

⁴ The quote is taken from the section in between 10:25 and 10:58 of the video.

Brain's plasticity allows experience to re-design our neural connections: if we practice a skill by repeating a task over and over, denser and more efficient neural connections are established, and we improve. If we experience obstacles and conflicts in stories, over and over, and witness to characters overcoming them, we get ready to do the same. Fiction is constantly rewiring our brains, according to what is needed to lead a satisfactory life in our society.

"Fiction is a powerful and ancient virtual reality technology that simulates the big dilemmas of human life" (Gottschall, 2012:67) and teaches us how to face them. This is why all good stories contain conflict: to challenge us to overcome it.

Fairy-tales have been carrying out this task for centuries. For eras up until today, children have been told stories of wolves eating children, children being abandoned by their parents, parents dying ... Nowadays many parents worry about the dark side of fairy tales, but if these stories have nevertheless survived in oral tradition for so long, there is a good reason: they constitute a training for children, a process to tame human fears, which is lead in the most secure place for a child (his/her home) by the most trustable people (his/her parents) (Rodari, 1973).

In addition to favouring vicarious experience, mirror neurons also play another fundamental role in storytelling: they allow us to train our ability to feel other people's emotions, to put ourselves into someone else's shoes, developing our ability for "empathy" (Mar, Oatley, Peterson, 2006). This is the core of a fourth possible reason why stories have developed with humans: they foster social connections.

As a matter of fact, stories activate not only the mirror neurons, but also the emotional part of the mid brain. This leads people to identify with the characters on a mental level, but also on a physical level. A 2004 research discovered that if we read a story where characters suffer, our brain does not activate the brain areas related to process where physical pain is, but it does activate the areas that process how unpleasant the pain feels and how much it bothers the person (Singer, et al., 2004).

Exposure to stories and social abilities seem to be linked, because stories allow us to live other lives, different from ours, and therefore expand our understanding of the world (Hakemulder, 2000; Mar, Oatley, & Peterson, 2006).

Stories allow us to transcend the boundaries of our everyday existence and gives us access to a wider *human* experience (Beres, 2017). When we are children, in fairy-tales we meet archetypal characters which offer a wide repertoire of behaviours and profiles (in the Preface of "Fiabe Italiane", Italo Calvino calls it "initiation to life"). As we grow up, we get in touch with many different characters, and are affected by their emotions, which influence our perspective on life, hence becoming a means of transformation (Oatley, 2002).

Stories tend to have a moral which promotes pro-social behaviours, while relentlessly stigmatizing the antisocial (Gottschall, 2012); this is confirmed by a recent study (Smith, et al., 2017⁵) which observed that, in surviving oral cultures, cooperation is always indicated as preferable to competition. This adds to a precedent study highlighting that stories impact on the level of trust we put in others and in society (Appel, 2008).

Moreover, stories preserve the memory of human communities, from small ones as families to wide ones as nations. Stories keep trace on what is happening inside the community, something that became necessary when groups evolved into bigger social nets and their members needed to make sense of increasingly complex relationships. Living in a community requires keeping tabs on who the group members are and what they do (Hsu, 2008): when they do something that impacts the life of the whole community, in a positive or negative way, it is important to keep memory of it.

This happens with people but also with places. In Australia and the American Southwest, Aborigines and Apaches developed repertoire of stories which relied on the local topography: each hillock, boulder, and stream held a part of the story. “Myth and map became coincident” (Foley, 2002). It was a way to impress them in the landscape so that they would never be forgotten by the community, but it implied losing part of their identity when the land was taken away from them.

In conclusion, storytelling is not useless and futile, but has played a key role in human evolution. This has lead the human mind to be instinctively fascinated by it and to develop an endless craving for stories, as well as to adapt and re-wire so as to apply a narrative structure not only when telling stories but in any situation. In other words, “human thinking is story based.”

1.2 Story structure

Since human thoughts tend to be structured like stories, we need to first understand how stories are structured. This section will focus on literary texts (rather than on oral or performed stories), which have been the main object of research studies because their fixed printed form facilitates analysis.

We need to start by making a distinction. As Jerome Bruner writes in his “Actual Minds Possible Worlds” (1986), when we read a literary text we are actually dealing with two kinds of text: one is

⁵ This study (Smith, et al., 2017) observed that, in surviving oral cultures, stories have the following features: they humanise natural entities, for example animals or celestial bodies; they all end with reconciliation and settlement of the differences; they deliver norms and principles regulating cooperation and social behaviour, particularly gender equality, social equality, friendship, group work, group identity, social inclusion.

the "actual text", made of the sequence of words on the page; the second is the "virtual text", which corresponds to its deeper meaning, can change from reader to reader and is prone to interpretation. We will consider both of them (the actual text in 1.2.1 and the virtual text in 1.2.2), hence defining the essential features of narrative texts. Finally in 1.2.3 we will evaluate the definitions of "narrative" provided by several scholars and see how, there is general agreement on the distinctive characteristics of stories, despite the lack of a unitary, universally shared definition.

1.2.1 Actual text

The first known attempt to describe the structure of stories was made by Aristotle in the "Poetics." The Greek author talks about a basic three-act structure: beginning (where the audience is introduced to the setting, the characters, and the situation or conflict), middle (where the characters have to overcome obstacles), and end (where the conflict reaches its climax and a resolution is achieved). This description is still valid today.

Aristotle considers conflict the key element to generate a story. This has been confirmed by many authors after him, to the point that today storytellers of all genres take for granted that "fiction is about trouble" (Gottschall, 2012:52; Baxter, 1997; Burroway, 2003).

The necessity for stories to include a conflict implies a common structure: a character wants to obtain something and in order to do so s/he needs to overcome several obstacles. Gottschall (2012) puts it into what he calls a "story's master formula": "Story = Character + Predicament + Attempted Extrication." The more difficult are the obstacles, the more engaging is the story.

Having a common structure does not mean telling always the same story, because the possible conflicts, obstacles and solutions are endless. This is well exemplified when we take into account one of the most well-known story structures: Joseph Campbell's "Hero's Journey".

In his seminal book "A Hero with a Thousand Faces" (Campbell, 2008, first published in 1949) Campbell states that virtually all of the world's mythic traditions share a universal motif of adventure and transformation. He calls it "the hero's journey" and says that it underlies hundreds of different works of fiction.

The hero's journey is divided into three parts (like Aristotle's basic structures): Departure, which includes five initial stages (the call to adventure, refusal of the call, supernatural aid, the crossing of the first threshold, the belly of the whale); Initiation, which includes six stages (the road of trials, the meeting with the goddess, woman as the temptress, atonement with the father, apotheosis, the ultimate boon); Return, which includes six final stages (refusal of the return, the magic flight, rescue from

without, the crossing of the return threshold, master of the two worlds, freedom to live). This structure can be recognized in Homer's "Odyssey", in Moses' Bible story, in Herman Melville's "Moby Dick", in Charlotte Brontë's "Jane Eyre", but also in the movie series "Star Wars", in Disney's "The Lion King" and in the series of Harry Potter novels. The list of stories exemplifying the "hero's journey" could go on, to prove that sharing the same structure does not imply creativity limitations.

Joseph Campbell was not the first to identify similarities in story repertoires around the world. Scottish anthropologist James Frazer preceded him when he compared costumes of different cultures around the world in his work "The Golden Bough: A Study in Magic and Religion," published for the first time in 1890 and revised until the final edition in 1915. Frazer's interest was not directed exclusively to myths and folk stories, which anyway are part of his analysis. It is interesting to note that he too identifies a cyclic nature in traditional stories and a common theme of a hero descending to Hell, facing conflict and fears to finally come back victorious.

What Frazer and Campbell did with myth, Russian linguist and anthropologist Vladimir Propp did with fairy tales when he wrote "Morphology of the Folktale" (first Russian edition in 1928) and "Roots of the wonder tale" (first Russian edition in 1946). According to Propp, fairy tales reflect what used to happen to children during the initiation rituals of primitive communities (for example, being left alone in an inhospitable place, like a forest, and having to survive and find the way home). After those rituals were dropped, fairy tales took their place.

Propp describes thirty-one functions that, he says, can describe every possible fairy tale: absention; interdiction; violation of interdiction; reconnaissance; delivery; trickery; complicity; villany or lacking; mediation; beginning counteraction; departure; first function of the donor; hero's reaction; receipt of a magical agent; guidance; struggle; branding; victory; liquidation; return; pursuit; rescue; unrecognized arrival; unfounded claims; difficult task; solution; recognition; exposure; transfiguration; punishment; wedding. Not all functions need to be present in a fairy tale, but this order must be respected.

It is easy to see how Propp's functions resembles the stages in Campbell hero's journey. It is also evident all these examples share a common three-part structure where a character is faced with adversities, fights them, and solves them while finding s/he has changed in the process.

Things change a little when we get closer to modern times. In 1947 writer Kurt Vonnegut wrote his anthropology master's thesis (which was rejected by the University of Chicago), where he stated that stories have shapes that can be drawn on paper, and even if every story has a certain shape, six recurrent shapes can be recognized. They can be found by tracing ups and downs of the protagonist's journey. He named it the "emotional arc" of the story (Fusco, 2016).

Vonnegut defines the emotional arc of a story as a line plotted on the 'Beginning-End' and 'Ill Fortune-Great Fortune' axes. The "GI" axis, mathematically similar to the y-axis, places Ill Fortune, defined by Vonnegut as "sickness and poverty," at the bottom, and Good Fortune, "wealth and boisterous good health," at the top. The "BE" axis, the equivalent of the mathematical x-axis, represents the beginning and end of the story. The story line flows in this space. All stories fall into six emotional arcs—or, rather, three arcs and their inverses: Man in Hole, Boy meets Girl, From bad to worse, Which way is up?, Creation Story, Old Testament, New Testament, Cinderella (Fusco, 2016).

Using computational tools, in 2016 a group of students of the University of Vermont classified 1.327 stories from Project Gutenberg's fiction collection and found a set of six core emotional arcs which form essential building blocks of complex emotional trajectories. They match with Vonnegut's six emotional arcs (Reagan, Mitchell, Kiley, Danforth, Sheridan Dodds, 2016).

It is interesting to see that, once again, story structure is defined by the path undertaken by the main character. The main difference here (and the modern trait) is that we are no longer only talking about events happening in the outer life of the character, but also in his/her inner one.

Regardless of agreeing or not with Vonnegut's theory, we can remark that all traditional stories have to do with universal emotions, like love (Gottschall, Nordlund, 2006), and deal with the events and struggles of human existence (Gottschall, 2008; Hogan, 2009).

Discussing the thematic content of stories is not our aim and we will not take it further, but it was important to include it here because, as we saw, in the history of storytelling and human society it has impacted the way stories are structured.

What is important to note is that, no matter which culture they belong to, stories present structural and thematic similarities in their actual text:

1. A basic three-act structure (beginning, middle, end), often cyclical;
2. The presence of a conflict, which sparks action;
3. A protagonist who undertakes a "journey" in reaction to that conflict.

1.2.2 Virtual text

If stories were only chronicles of plain facts, it would be difficult to explain why humans got so passionate about them to preserve them in oral tradition and then in writing for centuries. In fact, stories also have a relevant feature: a meaning (Mishler, 1995). Fulford (1999:6) expresses this very

clearly: “A story is always charged with meaning, otherwise is not a story, merely a sequence of events. [...] And we can be sure that if we know a story well enough to tell it, then it carries meaning for us. [...] Some stories may be unjustly forgotten, but no stories are unjustly remembered. They do not survive through the vagaries of whim. If a story has been swimming in the vast ocean of human consciousness for decades or centuries or even millennia, it has earned its place. [...] Stories survive partly because they remind us of what we know and partly because they call us back to what we consider significant.”

When talking about the virtual text, Bruner (1986) cites Frank Kermode’s work and loans his terminology: he uses the word *sjuzet* for “the linear incidents that make the plot”, and *fabula* for “the timeless, motionless, underlying theme”. According to Kermode, their interaction is what generates the power of stories. In fact, the actual text (*sjuzet*) might always stay the same, but the virtual one (*fabula*) changes constantly, and can be different from one reader/listener to the other (Bruner, 1986). An example of this is provided by an anecdote Gianni Rodari tells in his “Grammatica della Fantasia”. When he used to work as a teacher, he told his students “La chèvre de monsieur Seguin” by Alphonse Daudet. It is the story of a sheep who dreams about being free: one day she decides to run away from her owner and ends up being eaten by the wolf. Rodari’s students were disappointed by the ending: for them only victory could be considered a happy ending. Rodari thought differently: in the story he saw the brave attempt of a sheep-heroine who is ready to die fighting for her freedom. This episode led him to realize that a message (and let us not forget a story is a message) is always decoded according to the individual code of the recipient (Rodari, 1973).

Also Barthes theorised that all narratives share structural features, weaved differently in each case, and thought of “reading” a text as a form of “co-writing” of it, since each recipient of the narrative can virtually interpret it in a different, personal way (Barthes, 1974).

According to Greimas and Courtes (1976) “a primitive or irreducible feature of story [...] is that it occurs jointly on the level of action and in the subjectivity of the protagonists” (cited in Bruner, 1986: 20). This “dual landscape” view allows the reader to enter into the mind of the characters and activate processes of recognition and identification leading to empathy (Bruner, 1986).

According to Genette (1972, 1983), all narrative is necessarily *diegesis* (telling) since it can attain only the illusion of *mimesis* (showing) by making the story real and alive through the use of several techniques and tools (distance, time, perspective, ...). In this way the degree of identification can be manipulated by the author.

As for real human beings, fiction characters act in the real world but also have a private, internal dimension. Stories originate at the intersection of what happens outside the character and what happens inside him/her: here is where they react to the conflict.

Talking about the virtual text, Bruner writes: “the fabula of story [...] seems to be a unity that incorporates at least three constituents. It contains a *plight* into which *characters* have fallen as a result of *intentions* that have gone awry.” This recalls the basic three-act structure mentioned for the actual text: the character was living his/her life, something came to disrupt it and forced him/her to leave his/her comfort zone to fight and restore serenity. We see here that what happens outside the character goes in parallel to what happens inside.

In fact, Bruner writes “What gives the story its unity is the manner in which plight, characters, and consciousness interact to yield a structure that has a start, a development, and a sense of ending” (Bruner, 1986:35).

This unity implies another element we need to mention: causality. There is a “connected connection” (Mishler, 1995) between the events in the story, they are not only temporally ordered. The link is a relation of causality and/or thematic coherence between the events (Boase, 2008). This is yet another element that differentiates stories from simple accounts of events.

After discussing the actual text, we highlighted three observations as the result of the analysis of structural and thematic similarities. Now, we can add to that list on the basis of what we said about the virtual text:

4. Significant stories have a meaning;
5. Characters in stories are moved by intention (double landscape);
6. Events in stories are linked by causality.

1.2.3 Different descriptions, same features

Defining what a story is has been a challenge several people overtook in the past centuries. In fact, it seems every essay, book or paper on narrative has to start with a definition of terminology. Nonetheless it is true a unitary definition has not been found but there is a general agreement on the defining elements of stories, as we saw in the last two sections and as we will further highlight in the present one.

We said that stories are sequences of events developing in time and linked by causality, and that they have a three-act structure based on conflict. We also said that they are something more than plain sequences of events: stories have a meaning, which connects the parts and constitutes its message.

As Jerome Bruner says, “narrative” is “a unique sequence of events, mental states, happenings [...] But these constituents do not have a life or meaning of their own. Their meaning is given by their place in the overall configuration of the sequence as a whole - its plot or fabula” (1990:43).

In addition to the scholars we have already mentioned, it is interesting to note that these features are confirmed by other scholars working in different fields.

American psychologist and artificial intelligence expert James Wertsch writes that: “Narrative is organized around temporality, it has a central subject, a plot with a beginning, middle and end, and an identifiable narrative voice; it makes connections between events; it achieves a closure, a conclusion, a resolution. [...] The cognitive function of narrative form is not just to relate a succession of events but to body forth an ensemble of relationships of many different kinds as a single whole.” (Wertsch, 1998:80,81). Also French philosopher Paul Ricoeur focuses on the meaning stories acquire when all elements are connected: “The activity of narrating does not consist simply in adding episodes to one another; it constructs meaningful totalities out of scattered events. The art of narrating, as well as the corresponding art of following a story, therefore requires that we are able to extract a configuration from a sequence” (Ricoeur, 2005:278). Finally, narrative theorist David Herman writes that “One of the hallmarks of narrative is its linking of phenomena into causal-chronological wholes” (Herman, 2003:176).

It is easy to see how they all confirm what we have defined in 1.2.1 and 1.2.2, despite the fact they are not all literary scholars and belong to different fields of research. It is important to highlight they all identify as essential the presence of a connection between the events, that is instinctively perceived by people thanks to the narrative form (Bruner, 2004). Simple sequences of events, like annals and chronicles, cannot be considered narratives, since they do not build a configuration from a list of events (Wertsch, 1998:79). The same can be said about mere descriptions, argumentations, generalizations, abstractions.

If limitations apply to the structure, language and content that can be employed in stories offer wide opportunities: narrative includes both true and invented stories, as well as narrations of personal experiences, and they can be expressed in a variety of languages or combinations of codes, not only textual (Dettori, Paiva, 2009).

1.3 Human thinking is story-based

When the embryo starts developing, millions of neurons are formed. After birth, their number decreases, and they are assigned different functions, depending on the input of the surrounding environment.

Humans have been telling stories for more than 100.000 years and therefore the human brain has biologically evolved on the basis of this input (Plotkin, 1982; Donald, 1991; Tomasello, 1995; Bruner, 1990; Pinker, 2000; Nelson, 2003): the constant “story dominance in human interaction has rewired the human brain to be predisposed before birth to think in, make sense of, and create meaning from, stories” (Haven, 2007:24). Several studies on babies’ neural processing have proved that, already at birth, humans think in story terms (Bruner, 1990; Tallal, 1994; Huttenlocher, Dabholkar, 1997; Pinker, 1997, 2000; Bransford, Brown, 2000; Nelson, 2003; Newquist, 2004; Shreeve, 2005).

Because we are born with this predisposition towards stories, human life has shaped to favour it and consequently strengthen it. Children are born with an innate attraction to stories (which is due to biological evolution) and enjoy them very much; from birth on, they are told and read stories, ending up to internalize story structure (Johnson, 1987; Bruner, 1990; Crossley, 2000), and setting the brain to rely on stories even in adult life (Cliatt, Shaw, 1988; Haven, 2007). This predisposition for stories works in favour of the use of narrative in learning because it implies the brain is provided with ready-to-use paths when processing narrative input (Haven, 2007:27).

Therefore, thinking is connected to story construction, and by that we mean that “we use story elements, story relationships, story architecture to understand, and to make sense of, the real-world events and people around us” (Haven, 2007:10).

1.3.1 Our life, our story

We think of our own life in story-form, in order to make sense of what happens and therefore give meaning to our existence. This is another reason why storytelling was crucial to evolutionary adaptation: “it allows us to experience our lives as coherent, orderly, and meaningful” (Gottschall, 2012:102). We start doing this during our childhood, when we develop conscious awareness of us while first experiencing narratives (Nelson, 2003), then making ourselves the protagonists of the stories we invent (Rodari, 1973, expressed it beautifully as: “In order to know oneself, it is essential for the child to be able to imagine him/herself”), and we keep doing it for all our life: we frame our

experiences into stories to give coherence and significance to our existence (Linde, 1993; Oatley, 2002).

The American author Paul Auster brilliantly expressed it: “We construct a narrative for ourselves, and that’s the thread we follow from one day to the next. People who disintegrate as personalities are the ones who lose that thread” (Kerr, 1989). As a matter of fact, psychotherapy makes wide use of storytelling in helping patients re-write their personal stories and overcome trauma, for example by the telling of redemptive, healing stories (McAdams, 1993; McAdams, 2005; Esfahani Smith, 2017). The re-writing process is possible because, differently from what is commonly believed, our memories are not precise records of what actually happened: they are *reconstructions* of what happened, and their details are unreliable (Brown, Kulik, 1977). Our mind tricks us into developing memories which maintain our status of protagonists of what happens (and good, heroic ones), and these “lies” prevent us from grieving on our existence. People suffering of depression are unable to tell themselves these “positive lies”, and risk succumbing to the weight of life (Taylor, 1989).

We need stories to fight the terrorizing thought that our existence might be meaningless, nothing but the product of fate. Our life stories, then, become our “personal myths” (Gottschall, 2012).

All this goes to show we are literally the product of our *storytelling mind*: it creates the stories we tell ourselves about ourselves, and it filters and reconstructs our memories. We need it to make sense of our life and end up using it to process all the information we receive.

1.3.2 Processing information in story form

In the XX century the study of split-brain patients allowed researchers to study the functioning of the two hemispheres as isolated processors. The pioneer of this research was the American psychologist and neuroscientist Michael Gazzaniga. “In his research, Gazzaniga and his collaborators have identified specialized circuitry in the left hemisphere that is responsible for making sense of the torrent of information that the brain is always receiving from the environment. The job of this set of neural circuits is to detect order and meaning in that flow, and to organize it into a coherent account of a person’s experience - into a story, in other words” (Gottschall, 2012:96).

In a healthy brain, the two hemispheres exchange the sensorial information they receive in order to process them. This cannot happen in a split-brain person.

Gazzaniga tested some split-brain patients, to verify how the two isolated hemispheres react to stimuli. Each eye is connected to one hemisphere: input received from the left eye is processed in the right hemisphere, and input received from the right eye is processed in the left hemisphere. Gazzaniga

had the patients look at images using only one eye at a time, and then asked them to recognize the images they saw among others. As expected, the patients physically reacted to all the images shown, confirming their eyes were working. They were able to verbalize what the right eye would see and recognize the image among others, and this too was something Gazzaniga expected because the left hemisphere is where language areas are located.

What surprised him is that the patients would also try and pick the image they saw with their left eye, even though it was impossible they knew they received that stimulus. When he asked them how they chose the image card, they elaborated an explanation, sensible but undoubtedly forged because it was impossible that specific information had been processed by the brain. They were lying.

Gazzaniga realized that was a proof of the power of the left hemisphere: it realized something strange was happening and had to find an explanation for it (Gazzaniga, 2000; Gazzaniga, Human, 2008).

Gazzaniga calls this mechanism “the interpreter”, Gottschall “the storytelling mind”, Bruner “narrative mode”: it is our natural instinct to explain everything that happens to us or around us, to try and make sense of it. Even though these “explanations” do not have all the features we identified for narrations, they are not even only sequences of events: their events are connected by causality and often have a strong meaning for the person creating them, so we can say that they are shaped into story format.

This mechanism is fundamental for human existence. Our environment provides us with information that are not always complete, so the human brain has evolved to take scattered elements, see the connections between them, arrange them, (if necessary) fill the gaps with deductions based on past experiences, and forge them into a meaningful piece of information in the form of a story. In a sense, we could say it is the way Nature equipped us to solve the dilemma of knowledge (Gopnik, Meltzoff, Kuhl, 1999).

We start training our storytelling mind when we are children: first we are told stories, and we assimilate their structure, then we start inventing and telling our own, and through them we rationalise our experience, we start familiarising with abstraction, we learn to dominate reality (Rodari, 1973). “Creating narratives is a kind of causal thinking, in which the narrator seeks to fit their experience into some form of narrative schema” (Robinson, Hawpe, 1986). We do so with our life (1.3.1), and with every input we encounter.

Proof of this is provided by the experimental video of Fritz Heider and Marianne Simmel (1944), and before that by Lev Kuleshov’s movies dating back to the beginning of the century. In the first, three geometric shapes move around a screen, in the second the same still images are shown in succession.

What our storytelling mind sees, though, are stories. This happens for two reasons: our tendency to see causality even when it is not explicit, and the so called “theory of the mind”.

The first reason is proved not only by Heider and Simmel’s and Kuleshov’s studies, but also by a long-forgotten research (Michotte, 1963) which again used videos as testing material, and which concluded that “when objects move with respect to one another within highly limited constraints, we *see* casualty” (Bruner, 1986:17). This research sustained that humans perceive space and time in a primordial way, and it is impossible for them not to put them in a causal relation.

One could reply that this mechanism is not innate but is shaped by experience and the associations which we learn are plausible, so in 1979 the experiment was repeated on six-months old babies. The results were consistent with the previous one (Leslie, 1979) supporting the idea that causality is a human innate “mental category,” to use a Kantian terminology (Bruner, 1986:18).

This was also tested with sentences in a 2010 experiment. Subjects were shown two combinations of sentences: the first was “Joey’s big brother punched him again and again. The next day his body was covered by bruises,” and the second was “Joey’s crazy mother became furiously angry with him. The next day his body was covered by bruises”. Even though in the second combination the action of “punching” is not mentioned, therefore it might seem more difficult to find a correlation, subject reported that in the second sentence it is the mother who beats Joey (Chabris, Simons, 2011). Obviously, they have been tricked by the adjectives and verb used (suggesting an altered state of emotion) and have made assumptions. This happens because when our brain receives information as parts of a compound, it presumes they are pertinent and coherent; if there are missing pieces it readily fills them by making hypothesis (Weinschenk, 2011:77).

The second reason why we tend to see stories everywhere has to do with what has been called “theory of the mind” (O’Neill, Shultis, 2007; Hsu, 2008). By this we refer to the mechanism that sees our mind attributing mental states (awareness, intent) typical of humans to another entity, even though that entity is not human. This is why in Heider and Simmel’s video we do not see circles and triangles as inanimate objects but as people, each one of them with his/her personality. This ability is crucial for story understandings and constitutes the basis of empathy. “Theory of mind” has been vital for social living, and this might be the reason why this mechanism has evolved with us and our mind has shaped to see stories everywhere.

Our storytelling mind or “narrative mode” understands something that is absolute by contextualizing it in the individual experience (Bruner, 1986). This is the opposite of the other modality of thought Bruner theorises, that of the paradigmatic or logic-scientific mode, which connects elements with the goal of establishing formal or empirical proof, transcending the particular because it aims to

abstraction (Bruner, 1986). The narrative mode, or storytelling mind, “deals in human and human-like intention and action and the vicissitudes and consequences that mark their course” (Bruner, 1986:13). It is the most natural to us, the closest, the most antique, the one we can see emerge during infancy.

In conclusion, “the storytelling mind is a crucial evolutionary adaptation” (Gottschall, 2012:102). It allows us to experience our lives as coherent, orderly, and meaningful, and provides us with a structure to process and organize information.

1.4 Storytelling and memory

We said that we have a “storytelling mind” and this leads us to processing the information we receive organizing it in story structure. Therefore, it makes sense to say that input which is already in story format is the easiest for us to process and store in memory. We can give three reasons in support of this statement.

The first has to do with the structure of stories. As we said in 1.1, children grow up following a strict diet of stories and end up interiorizing their format (beginning, problem/middle part, ending, all connected by causality). They rehearse it every time someone reads or tells them a story, and they get pleasure out of this. This is why children want to hear always the same stories, the ones they know very well: it allows them to make assumptions on what is going to happen and be pleased in finding them correct.

“As stories from childhood are linked to positive emotional experiences, they provide an insight into the patterning system by which memories are stored. Our brains seek and store memories based on patterns (repeated relationships between ideas). This system facilitates our interpreting the world—and all the new information we find throughout each day—based on prior experiences” (Willis, 2017). In other words, our brain searches and processes information based on a pattern. If an information presented to us can be processed using a pattern we know very well, the process itself will be easier and quicker. There is no pattern we humans know better than that of stories.

Before giving the second and third reasons, we need to dedicate a moment to describing the structure of memory, since it is a complex system and it contains different types of material.

Our memory system includes two reservoirs: the *working memory*, where information collected by senses is stored for the time needed to use and evaluate it, and the *long-term memory*, where information is actually stored and kept. The latter is divided into: *explicit or declarative memory*,

whose content can be consciously recalled and whose functioning is connected to the hippocampus and therefore to emotions, and *implicit or non-declarative memory*, whose content regards movements, perceptions, reactions' scheme, etc. and which is sub-divided into *procedural memory*, *conditioning* and *priming*.

The explicit or declarative memory in turn is formed by three memory systems: *remote memory*, a lifetime collection of data about various topics; *episodic memory*, which is the memory for "events" and contains the memories of what happened in our lives; and *semantic memory*, which is the memory for "facts", and contains notions concerning the world (Schumann, et al., 2004).

Episodic memories are not memories of simply what happened but are our unique take on them (Tulving, 1985). They are not always trustable, since they are reconstructions filtered and modified by our experience (Schacter, 1995; Neimark, 2004) and by what we know happened after the event (Freeman, 2003).

They are special because they include sensorial information, and also the emotions we felt or associate with the moments remembered (Gopnik, Meltzoff, Kuhl, 1999). This is also what makes stories special, and this leads us to the other two reasons why story format is the most memorable.

The second reason is that stories can be rich of sensory details, and greater density of sensory details allows for better memory (Anderson, 1993; Squire, 1997; Schacter, 1997; Foer, 2006), because the richer an input the more likely it will be stored into memory. We would think we need to live something, to be impacted by it from a sensory point of view, but this is not the case. When we read a story and it contains sensory information, the areas connected to the processing of that sensory stimulus get activated as if we were experiencing it in real life. This has been discovered in a 2006 study, where participants were asked to read words with strong odour associations, along with neutral words, while their brains were being scanned by a functional magnetic resonance imaging (fMRI) machine. Researchers found out that when subjects looked at the Spanish words for "perfume" and "coffee," their primary olfactory cortex lit up; when they saw the words that mean "chair" and "key," this region remained dark (Gonzalez, et al., 2006).

The third reason why stories facilitates memorisation is that they can generate emotions (Weinschenk, 2012:137-139), and emotional value is an important feature when talking about the creation of memories: we remember events that have an emotional impact (Anderson, 1993; Mallan, 1997; Neimark, 2004), while we do not remember neutral elements. We already mentioned how storytelling and empathy are connected: we think we have complete control over our thoughts, but this is not the case. "Studies have shown that people's deepest moral beliefs and values are modified by the fiction

they consume,” writes Gottschall (2012:151) and this implies opportunities (storytelling can be used to raise awareness about social issues) and dangers (fake news, “alternative” truths, ...).

Stories are such powerful tools because they sneak through the back door: people are not suspicious in front of stories, they think they can handle them and remember they are “just stories” but what happens is that “the emotions of fiction are highly contagious, and so are the ideas. [...] In fact, fiction seems to be more effective at changing beliefs than nonfiction, which is *designed* to persuade through argument and evidence” (Gottschall, 2012:150). All public speakers know that “anecdotes persuade more than data” (Weinschenk, 2011:168) and are in fact a good way to start or revive a presentation. Fiction can implant information in our minds without us noticing it.

In conclusion, presenting information in the format of a story seems like a good idea if we want that information to be easily processed and then stored in the long-term memory.

1.5 Thinking, memory and images

In his “Descartes’ error”, Antonio Damasio says that an organism can be said to have a mind only if the organism has “the ability to display images internally and to order those images in a process called thought” (Damasio, 1994:89). He thinks our thoughts are mainly made of images, regardless of the sensory modality in which they are generated, if they are about a thing, a process involving things, words or other symbols (Damasio, 1994:106-108). From an evolutionary standpoint, this makes sense: seeing is fundamental for our survival, we have been processing visual images (the environment around us) for millions of years before we encountered text a mere few thousand years ago at most. Personal experience too seems to confirm it: “when we think about a story (or actually when we think about anything), we think in pictures and visual images” (Weinschenk, 2009:115).

It is reasonable, then, that we also remember best in images. This phenomenon has been called “pictorial superiority effect (PSE). It has been proved again and again by research from the 1960s to the present (Brady, Konkle, Alvarez, Oliva, 2008). For example, it was discovered that when shown a sequence of more than 2,500 pictures, some already seen and some new, people can recognize those they have already seen with 90 percent accuracy. Sometimes we can remember pictures even years later (Medina, 2014). Instead, we struggle with text, because we force our mind to do a double process: when we read, we are actually processing pictures (letters), to recognize patterns (words) and structures (sentences, paragraphs); once they are in our mind, we turn them into images representing the meaning.

Visual memory is the memory mnemonists train and use to achieve their goals, as told by American journalist Joshua Foer in his book “Moonwalking with Einstein” (2011). Foer found out about memory championships by accident and got so passionate about them to decide to train in order to become a memory champion. The book is the story of his experience.

There are several techniques that mnemonists⁶ use in order to memorize an astonishingly wide amount of information. The main one, and the most antique, is the “method of loci,” also known as “journey method”, “memory palace” or “memory theatre.” In this technique, the mnemonist codifies every information he wants to remember into an image and places it inside a building s/he knows very well. If the information to be remembered has several parts (which is often the case), the images are placed along a designed route in the familiar space: when the mnemonist needs to retrieve the information, all s/he has to do is re-run the route, “observe” the images in his/her mind and re-codify them in order to retrieve the original information.

Other techniques are: for short numbers, the use of the Major System, a code which converts numbers into sounds, allowing the building of words which are then translated into images to be positioned in the memory palaces; for longer numbers, the Person-Action-Object method (known as PAO), where every two-digit number from 00 to 99 is represented by a single image of a person performing an action on an object. Every mnemonist builds his/her own PAO system, so each one has his/her own. The images of the system can be combined and create complex images corresponding to virtually every possible number.

It might seem like an arduous process but, as Foer’s book proves, it is all a matter of training and will. Memory champions are not smarter than other people: what makes them different is that they consistently train their brain to apply such techniques and learn to master them easily and seamlessly. Another group of people who rely on images is that of performative storytellers who are part of the cultural movement called “Storytelling Revival⁷” (Balbi, 2013; Odangiu, 2017). These modern *troubadours* tell stories to a public choosing their words on the spot, they do not have a text memorised like in theatre plays. How do they manage to keep in mind all the stories of their (sometimes very vast) repertoires? They codify every one of them into a sequence of images. Each image (often called “painting”) is very detailed and rich in elements, in order to provide the teller

⁶ Mnemonists are people able to perform unusual feats of memory, because of their innate abilities or (more often) because of their acquired expertise in the use of mnemonics (aids and techniques to enhance memory). In the latter case, mnemonists often decide to compete against each other, some of them achieving then the status of “memory champions”.

⁷ The “Storytelling Revival” or “Storytelling Renaissance” is a cultural movement which started in the 1960s in the United States and then spread all over the world. It aims to bring back the art of telling stories orally in those countries where this tradition was interrupted. Artists supporting the movement have organised in companies, associations, and national federations, like FEST – Federation of European Storytelling, leading to the building of an ever growing network and to the sharing of common principles (Zampolli, 2017).

with several “hooks” or “points of access” to start the reconstruction of the whole image, and consequently the telling of that section of the story. With a little training, this comes easy to the human mind, since people are used to reconstruct memories each time they remember them, and to do so in the form of visual clips (Loftus, Palmer, 1974; Weinschenk, 2011:56-57).

What we have said so far constitutes the basis to state that sensory details create images that allow trans-domain neural mapping within the mind of the story-receiver (Schank, 1990; Anderson, 1993; Hardcastle, 2003; Haven, 2007), and not only: they not only connect different areas, but they also allow the transfer of concepts from one mental domain to the other (Egan, 1997). If we take abstract propositions, we see that images created by sensory text details are easier to comprehend and more memorable than them (Tannen, 1999).

There is something we need to add to the idea of mental images when it comes to stories. We said (1.2) that when we read or listen to a story, we are not dealing only with the actual text (the sequence of words, the facts narrated) but also with the virtual text (our perception of the story, the underlying meaning). It can be argued, then, that our mental representation of a story does not include only what happens in the story but also its meaning for us. In fact, when we think of a story we read or listen to, we usually do not remember the exact words that were used, we might not even remember all the events in it, but we remember its meaning and how that story made us feel. This is what Schank calls “the *gist*” of the story, which could be assimilated to Bruner’s *fabula*: it is the essence of the story, its meaning, which might also be different from one person to the other according to individual sensitivity.

This leads us back to the claim that most of our thoughts are shaped into images. These images are sometimes called “mental representations” (Noordman, Vonk, 1998), and they are representations of the state of affairs described in a text. Successful memory of what is comprehended would necessarily involve the retrieval of such representations” (Zwaan, Radvansky, 1998).

In fact, extensive study on comprehension research has led to the conclusion that constructing mental images representing ideas in the text is one of the most successful strategies to improve memory and comprehension of texts in children (Pressley, 2001).

It was also discovered that these mental images are created by text details, and (as seen in 1.4) stories facilitate a greater density of sensory details (Bransford, Stein, 1993; Turner, 1996; Pinker, 1997, 2000; Pressley, 2001; Lakoff, Jhonson, 2003).

Hence, presenting information as pictures seems the most efficient way to present information to people (Weinschenk, 2009:115); and if images are an effective means of communication, even more so are moving images.

This is particularly true today since we are in a new era of communication: the spread of portable technology, its affordability, and the growth of social media has led to a new way of communicating that needs to be fast and efficient. Videos are the principal tool of this new era.

According to surveys and studies from marketing solutions and analytics companies, videos are the most successful type of content in reaching the audience on Facebook for marketing purposes: one user every two watches the video and decides to click on the corresponding link. Companies that use videos in their marketing efforts are 65% more effective at communicating with and retaining customers than those who do not, therefore their revenue are reported to have improved at a greater rate. In fact, 64% of consumers say watching a marketing video on Facebook has influenced their purchase decisions at least once (O'Neill, 2017), and surprisingly this happens thanks to its visual part only: 93% of videos on Facebook are watched without sound (Saric, 2017).

Another interesting data is that regarding how users like to get information online: 79% of consumers prefer to learn about a product via video rather than text, and 91% of consumers have watched explainer videos to learn about a product or service instead of reading a manual or textual explanation (The State of Video Marketing 2017: A Wyzowl Report, 2017).

1.6 Brief history of storytelling in education

Storytelling and education have been connected since the very beginning of human societies: oral cultures employed stories to educate the young ones to communal living (Smith, et al., 2017) and it still happens in surviving oral cultures.

Aboriginal Australians have been orally transmitting a repertoire of stories on the creation of the world and how all things came to be (often referred to as the stories of “Dreamtime”) for centuries, and they are still using them (in the few communities who survived the Australian genocide) to teach children not only about the past but also about how to behave in life.

Smith et al. (2017) analysed 89 stories told in seven different Asian and African hunter-gatherer societies, and found out that 70% of them are about social behaviour, and include norms and instruction on what the group expects from each individual. What is also very interesting is that the society with the highest percentage of skilled storytellers was also the one with the highest level of cooperation. This goes to testify that stories are powerful weapons when it comes to convince people, and it confirms that in oral cultures stories are used to educate.

If the world of oral cultures and “primitive” societies might seem far, we have an example of educational stories that is very close to many of us. In the Gospels, Jesus teaches his principles offering not sensible and rational explanations but stories: the parables. This might be why Italian poet Alda Merini in “La vita facile” wrote that “Jesus was the greatest storyteller of all times.” Also Fedro’s and Aesop’s fables, that we often tell to children, are examples of stories which deliver important and educational messages by means of metaphors (the fox representing cunning, the turtle representing wisdom, ...).

The tradition of storytelling has contained oral and written forms. However, when it comes to education, oral storytelling tends to be considered a more personal and therefore more effective form of storytelling. This because it implies a human connection between listener and storyteller, and because it can swiftly change and adapt to its public (Alterio, 2002).

After the second World War, the slow decline of oral cultures and the progressive standardization of school education might have deemed the end of storytelling in schools, but luckily it was not so. It was relegated to the education of children, but it survived, incorporated into a new perspective on education that put the student at the centre of the process and considered him/her in his entirety of human being.

The Seventies were revolutionary years in Italy in terms of education, and the defence of fairy tales and storytelling in the classroom had important guardians like writer Gianni Rodari and designer Bruno Munari. One of the main argument in Rodari’s fight for the importance of stories in school was that “Fairy tales allow [children] to build mental structures” (Rodari 1973:137). He had already realised something that neuroscientists would confirm only years later (1.3).

In agreement with this (even though they likely did not know each other) is Irish educationist Kieran Egan, who in 1986 published a book titled “Teaching as Storytelling” where he suggested that in primary schools the whole curriculum should be taught in narrative form because that is how children learn. Egan was puzzled by the fact schools seemed to recognize the value of stories and storytelling (classrooms often feature a section devoted to library, for example), but at a certain point they somehow would decide to ignore that children think and learn narratively, and start presenting subjects as series of information, in argumentative form. According to Egan, stories and imagination must be central in children’s education. When planning a teaching unit, the teacher should ask him/herself: Where is the story here? Who are its characters? What is the conflict?

School tends to take into account cognitive aspects and forget the emotional. Stories have the power of making the content meaningful to children, speaking to their emotions in addition to their brain.

They can be used to deliver complex information, and also to show the connections in between, instead of presenting them as isolated facts.

Egan's proposal was the basis of the studies of Daniel Willingham, who describes stories as "psychologically privileged" (Willingham, 2004): not only they expand the mental ability of making sense of information, but they also make the knowledge, ideas, values incorporated into them easier to understand and remember. This happens because children can rely on an ability (that of decoding stories) they have already developed before starting school, and that does not need further teaching. Since the Seventies, many books have been published containing techniques to use stories in the classroom (Morgan, Rinvulcri, 1983; National Storytelling Association U.S., Dailey, 1994; Wright, 1995). Storytelling has been applied to teach not only expected subjects like history, but also science: it has been proved that children's working memory cannot cope with extended chains of reasoning in science (Johnstone, Hogg, MacGuire, Raja, 1997), and as stories are easily incorporated into the memory (Weber, 1993), storytelling can help children link chains of cause and effect, improving their science learning (Bannister, Ryan, 2001).

The interest towards the use of stories in the context of education has led to the birth of a new approach, called *narrative learning*. It consists in "letting students make use of narratives of any kind (from invented stories to narrations of personal experiences), meaningfully related to assigned learning tasks" (Dettori, 2015). This approach has proved to lend itself to foster general skills while facilitating the construction of content knowledge. Moreover, it activates learners' creative potential for developing new understanding (Daskolia, Kynigos, Makri, 2015).

With the spreading of digital technology in society, education could employ new tools to make learning more efficient. This is when visuals definitely entered classrooms and started becoming an important part of teaching. The Theory of Multimedia Learning by Richard Mayer is an example of the impact digital technologies had in education and education studies.

Storytelling, too, was impacted by new technology: in the Nineties, in San Francisco, Digital Storytelling was born (Robin, 2008a, 2008b). In the beginning it was not meant to be used in education, but as a method for therapy, for people to learn how to talk about themselves and their stories; it used autobiography as a tool for self-discovery. Soon enough, its techniques and tools started spreading and ended up being absorbed in education.

Digital Storytelling became a tool that teachers could use to help their students enhance their information gathering and problem-solving skills, facilitate their ability to work in a collaborative team, tell their own stories and create a social community around them (Robin, 2008a, 2008b). One

of his main supporters is Jason Ohler, who in his 2008 book “Digital Storytelling in the Classroom” describes digital storytelling as a creative process in which a traditional story is combined with personal digital technology, such as a computer, a video camera, and a sound recorder.

As we said, it started as a way of communicating one’s personal life, but after a while it started being used to tell also other kinds of stories (Robin, 2008a, 2008b), such as stories that examine historical events, and stories that are primarily used to inform or instruct. However, many definitions of Digital Storytelling still refer to the original autobiographical use only.

Another ambiguity of Digital Storytelling is the technology employed. Originally, digital stories were meant to be a simple combination of a narrated audio-text, often voiced by the author, with selected still images (usually photographs) shown in sequence, sometimes with music or sound (Boase, 2008). However, users of digital storytelling have employed a variety of tools in their stories, including text, slides, audio effects, animations, etc. This new, “updated” use has grown because of the relatively low cost of digital devices, the ease of learning to create digital stories, and the availability of many sites on the web where stories may be displayed and shared (Meadows, 2003).

There is no agreement on this new form being included in Digital Storytelling. However, its validity is claimed by projects as Progetto PoliCultura by the HOC Lab at the Politecnico di Milano, in Milan, Italy.

The project started in 2006, when the lab developed an authoring system, called “1001 storia”, to be used in their work by non-technicians who wanted to create multimedia stories, particularly in the context of art and heritage institutions (Di Blas, Bolchini, Paolini, 2007). The tool turned out to be so user-friendly they decided to propose it in schools. This was made in 2008 and the project is still running. So far more than 700 stories have been produced and they are collected in the website www.1001storia.polimi.it.

The stories created with 1001storia combine an audio track with visuals (a slide show of images) and text (the transcription of the audio can be visualized if one wants). A story can have two structures: it can be a “complete” narration, with topics and sub-topics, arranged on two levels, or it can be a “compact” narration, featuring a simple sequence of topics. Each fragment lasts between one and two minutes. A whole story is usually between twenty and thirty minutes long.

Students first choose the topic and collect materials, then they organise them and create the content, which means writing the text, selecting the images, creating images if needed, finding or composing the music, recording the audio, etc. They insert all their material in the authoring system, check it, and then produce their video.

In addition to Digital Storytelling, we also find Narrative Learning Environments (NLEs) which are learning environments where Narrative Learning takes place.

They made their first appearances in the Nineties and are described as “a particular kind of learning environments which make uses of narrative as a way to facilitate learning and were implemented by means of AI techniques” (Dettori, Giannetti, 2006). Then, the term has expanded, and it has come to be applied also to learning environments developed in contexts other than AI.

In a 2006 paper, Italian researcher Giuliana Dettori identifies three types of NLEs. The first is that of *intelligent NLEs* (the “originals”, developed in a AI context) which consists of “technological environments in which the users interact in not trivial way with the system to generate consistent narrative, thanks to the implementation of *intelligent agents* and other AI techniques.” The second is based on *multimedia and narrative editors*, “hypermedia environments with some narrative guidance, and narrative editors, that is, multimedia editors explicitly oriented to the creation of narratives in the form of cartoon strips or short movies (Earp, Giannetti, 2006).” The third is that of “*home-made*” *NLEs*, consisting of NLEs “which make use of general purpose technology and envisage some narrative task within the overall design of a learning activity.” In a later paper, published in 2009, a fourth type is added: that of interactive NLEs based on Web 2.0 technology. In these NLEs, “users participate in story creation, receiving part of a narrative from the other participants and contribute to it complying with constraints and adjusting to the story’s global development” (Dettori, Paiva, 2009). In NLEs, the story is not a back-story, framing information and acting as “sugar on a pill” for unappealing subjects (Aylett, 2006), but it is connected to the content and supports learners in the construction of “cognitively meaningful narratives”, that is, “logically consistently configurations of casually connected events” (Dettori, Giannetti, 2006) strictly related to the learning tasks at hand.

NLEs have three characterizing dimensions: role of the student (s/he can be given a narrative or produce it, by inventing it or by re-telling someone else’s story), learning approach (NLEs can be adapted to be used within different learning approaches), technological means. The use of technology is not mandatory when it comes to creating NLEs, but it is preferable since it allows for more complex, detailed learning environments. Depending on the content, NLEs can be mediating tools for narrative activities (learning *to tell* stories) or for other kinds of activities (learning *by telling* stories) (Decortis, Rizzo, 2005).

1.7 How storytelling facilitates learning

After seeing how storytelling has played a key role in education since the very beginning, and before moving on to discussing the role of videos in the context of education, we would like to dedicate a section to analysing the reasons for storytelling as educational tool from a cognitive point of view. We will do so by focusing on four main aspects: comprehension, meaning, memory, motivation.

❖ Storytelling improves comprehension

Several research studies have proved that stories are far easier for students to understand and comprehend than other expository forms (Clymer, 1968; Armbruster, et al., 1987; Cooper, 1997; National Reading Panel, 2000; Texas Education Agency, 2002; Lehr, Osborn, 2005). This is true both for written and oral forms of storytelling.

As a matter of fact, reading stories have proved to benefit reading comprehension of all types of material (Smiley, et al., 1977; Short, Ryan, 1984; Griffey, et al., 1988; Armbruster, et al., 1987). Research on why this happens has focused on three contributing factors: prior knowledge, chunking, greater sensory details (Haven, 2007:92-97).

▪ Prior knowledge

Prior knowledge refers to accessible banks of information already held in the mind of the reader or listener, about any aspect of the input which is being received. Integrating new knowledge into a network of prior knowledge facilitates comprehension. Prior knowledge can be about the structure of the information (structural) or about the content (topical).

Several research studies prove that knowledge of the structure of stories facilitates comprehension because it provides an organizational framework within which incoming information can be integrated (Rumelhart, 1975; Mandler, Johnson, 1977; Sebesta, Calder, Clelan, 1978; Stein, Glenn, 1979; Dreher, Singer, 1980).

In fact, when processing stories the mind can access banks of prior story knowledge to know what to expect and to watch for in the text (Spiro, Taylor, 1980; Armbruster, et al., 1987). This is particularly useful when we process unfamiliar topics: “If you know a lot about a topic, it is much easier to elaborate the new information and remember what you have read or heard. However, when the topic is unfamiliar, the creator must lead the elaboration process. All are familiar with story structure and with character goal, motive, and struggles. Creators can use these to guide elaboration.” (Bransford, Stein, 1993).

- Chunking

Stories contain a large amount of information in digestible chunks: they “allow us to break down events into smaller units so that we can better understand the information being communicated”. Psychologists call this chunking of story parts “event structure perception” (Weinschenk, 2009:113). The main study supporting it is a 2007 research (Speer, Zacks, Reynolds, 2007). In its first phase it measured participants’ brain activity while reading stories about everyday activities. It was observed that their brains processed the story in chunks: the fMRI pictures showed a burst of activity, then a pause, then another burst, then another pause, and so on. In its second phase, a few days later, the same participants were asked to re-read the same stories. This time there was no fMRI scan, but they were asked to mark the narrative where they thought one chunk in the story ended and another began. When researchers compared the brain pictures and the chunking of the participants, they realised the patterns matched.

- Greater sensory details

When we listen to or read a story, the input is made of words, but what we see in our mind is images (as explained in par.1.5). Stories allow for the construction of mental images representing ideas in the text, and this process is the foundation of comprehension. They include great density of sensory details which generates effective mental images, and consequently facilitates comprehension (Cooper, 1997; Pressley, 2001).

These sensory-rich images have also been proven to allow trans-domain neural mapping within the mind of the story receiver (Schank, 1990; Anderson, 1993; Turner, 1996; Pinker, 1997, 2000; Hardcastle, 2003; Lakoff, Johnson, 2003). According to Tannen (1999), “images created by sensory text details [...] are more convincing, easier to comprehend and memorable than abstract propositions” (Haven, 2007:94).

- ❖ Storytelling enhances meaning

The reason to comprehend is to create meaning. This resides in the processes we engage in as we listen or read a story: it is the product of the interaction between the content of the story, our personal experience and prior knowledge, compared, filtered, and controlled by a story schema (Haven, 2007:104). When it comes to creating meaning in the classroom or anyway in the context of a learning course, storytelling can help for two reasons.

- Meaningful structure

Stories in education create meaning because they make sense from apparently chaotic and random events or bits (Blythe, et al., 2004). They allow learners to bring order to complex situations and apparent disconnectedness (Boje, 1991).

- Meaningful context

Stories provide a context that is meaningful for two reasons: it has a familiar structure and it includes emotions (Petrucchio, De Rossi, 2009). The first is helpful particularly in the case of non-narrative information. In fact, research studies led in kindergarten proved that science facts, theorems, and information gain meaning for students only when the students can place the information within the context and relevance provided by story structure and prior story information (Brown, 1991; Paley, 1990; Paley, 2000). This stays true also for older learners, with the addition of the second element we mentioned: emotions.

Stories provide an emotional and psychological element that sterile facts lack, and which makes the input more meaningful for learners. This is of great help to communicate content that tends to be judged as difficult or not appealing, like Math (Petrucchio, Mattioli, Loi, 2010) or technical subjects.

“Stories centre on problems in human interactions” and are “more comprehensible to students because they have more conflict and more information about the protagonist and the protagonist’s point of view” (Bruce, 1990). For example, students showed to comprehend and retain information about the building of a transcontinental railroad better if the motivations and goals of the builders were made clear and placed in story form (Armbruster, et al. 1987).

- ❖ Storytelling assists memory

Since stories are more understandable and are meaningful, it is a logical consequence that they are also more memorable than other formats. Roger Schank (1990) thinks stories form the framework and structure through which human beings sort, understand, relate, and file experience into memory. It is also how we recall information into consciousness.

Regardless agreeing with Schank or not, several other researches have proved that memories are retained better and longer if they are shaped in story form, because they use a structure the human brain is born with. We have discussed this in detail in 1.4 but we would like to summarise here the main factors making storytelling a powerful aid for memory: active co-construction of meaning, the creation of a connected network, multisensoriality, the presence of emotional charge.

- Active co-construction of meaning

When we read or listen to a story, we are not passive, as we might think we are: we are actually co-constructing the meaning. We are processing the information we receive, and we are putting pieces together, structuring them, extracting the meaning expressed by the story as a connected whole. This active involvement engages our brain and facilitates remembering (Bruner, 1986). This is why we do not tell children “Don’t go alone in the forest, and don’t talk to strangers”, but we tell them about a girl named Little Red Riding Hood. Children will likely identify with her, become frightened with her and triumph with her. The result will be they will determine for her/himself the lesson to be learned, and this will make it easier to accept. Also, because they had to fill the gaps themselves, it will be more meaningful and therefore memorable (Carrington, 2002).

- Connected network

Memories are all linked into a complex pattern of connections, which means we can get to the same memory through several paths. Also, we need to recollect only one element of the structure to be able to get access to it. Stories are rich in details and therefore offer several access points to the information they deliver. Providing information in story form means allowing the brain to include it in a network of associations and connections, making it easier to retrieve it.

- Multisensoriality

When we read or listen to a story, many parts of our brain cortex are active, including: auditory part to decipher the sound if the story is being told, vision and text processing if the story is being read, all visual parts of the brain as we imagine the scenes in the story, motor areas as we read about movement. The more the brain is activated and engaged with the input, the more information it processes, and the more it is likely to keep memory of it. This is even more true when stories are offered already as a multisensory input like videos.

- Emotional charge

Stories include emotions and allow for empathy. As we read or listen to a story, brain areas connected to the emotions activate as we empathise with the characters. Emotions are the definitive factor influencing the creation of memory: we remember what is emotionally charged, be it with positive or negative emotions.

❖ Storytelling generates motivation

It is an obvious statement, considering all we have said so far, but we think it is important to include this factor in the list of reasons in favour of the use of storytelling in education. Stories are a source of pleasure, and a pleasurable meaningful input is destined to be remembered (Balboni, 2002).

So far, we have considered storytelling from the point of view of a passive learner *receiving* stories. However, learning activities can also be designed to actively engage learners in the storytelling process. This would benefit not only the learning of the target information in the target subject, but all learning abilities. In fact, development of narrative skills has been proven to be beneficial for children in their later academic performances (Aram, Nation, 1980; Dickinson, McCabe, 1991; Feagans, 1982; Feagans, Appelbaum, 1986; Feagans, Short, 1984; Gee, 1991; Hemphill, Picardi, Tager-Flusberg, 1991; McCabe, Rollins, 1994; Orum, 1984; Stein, Glenn, 1979; Westby, 1984). For example, children's proficiency in the processing of narrative elements like conjunctions, event content, perspective shift, mental state references proved to be significantly predictive of later Math skills (Neill, Pearce, Pick, 2004).

1.8 Videos in the context of education

We said that videos' usage is high in the business world and constantly increasing its numbers (1.5). The marketing and business world and the world of education are obviously different, with different dynamics, but they have something in common: they both work to deliver a message, a piece of information, and make it stick with the receiver. If companies are increasingly using videos for their campaigns and their reports prove this is working with people, education might want to see these data as substantial and take inspiration for itself.

Not that the world of education has not used videos before or acknowledged their value. For example, Giovanni Freddi was one of the pioneers of audio-visuals in education in Italy. He started writing about it at the end of the Sixties, following the French example of the *Méthode audiovisuelle structuro-globale*⁸, and maintained his interest throughout his career. Why did he believe in the use

⁸ The *Méthode audiovisuelle structuro-globale* (in Italian "Metodo strutturo-globale audiovisivo") is a French evolution of the audio-oral method, and it was elaborated by CREDIF (Centre de Recherche et d'Étude pour la Diffusion du Français) in the 1960s. It presents many features typical of Structuralism (focus on the sentence, idea of language as a combination of structures, behavioural approach) but it puts more emphasis on the communicative context. In fact, technology is used to present scenarios with dialogues. However, even though it includes the use of technology (audio recorder, linguistic lab), its techniques are extremely similar to those of the audio-oral method. The teacher is like a director, and the learner is involved in structured dramatizations and guided comprehension exercises (Piantoni, 2014).

of audio-visuals (at the time, photographic slides or simple videos) for the teaching of languages? Because they allow learners and also teachers to “travel” and experience life in the foreign country of the target language, therefore presenting language and culture together, but above all because they provide a multisensorial input, where visual memory is activated and where images are anchored to sound (Balboni, 2012).

As we have said before, greater density of sensory details allows for stronger memory (Anderson, 1993; Squire, 1997; Schacter, 1997; Foer 2006), but we will see how this is not the only advantage offered by videos.

If we look at the use of videos in schools and educational institutions, there are two observations to be made.

The first regards the content provided online by institutions for self-directed learning. The use of videos in educational institutions seems to be mainly oriented to MOOCs (Massive Open Online Courses) (The State of Video in Education 2015: A Kaltura⁹ Report, 2015; Hansch, et al., 2015) and these videos seem to all fall into two categories: “talking head style”, where a talker is filmed while talking, and “tablet capture style”, where we cannot see who is talking, but hear his/her voice while looking at visual information appearing on screen like on a blackboard. It is evident how these two modalities are not the best to attract and maintain learners’ attention: they are the same old traditional frontal lessons but on a screen. As this study highlights, the idea that quality videos are achievable and can improve learning process seems to still be foreign to many instructors and institutions.

The second observation regards the students as producers of the content. At the moment, videos are used in class and numbers are raising¹⁰, but students seem to be rarely involved in the production of videos. If we look at the numbers in the Kaltura report, we see that student generated content is said to be “frequently used” by 20% of the respondents, “sometimes” by the 68%, and “never” by the 12%. Considering “sometimes” can mean “twice a year” as “once a month”, we realize these data would need specification but still they highlight how this type of content is the less considered one.

⁹ Kaltura is a New York-based software company founded in 2006. It operates in four major markets for video based solutions: Cloud TV (AKA OTT TV) for operators and media companies, OVP (Online Video Platform) offered mostly to media companies and brands looking to distribute content or monetize it, EdVP (Education Video Platform) offered to educational institutions who are increasingly relying on video as for teaching and learning, and EVP (Enterprise Video Platform) offered to enterprises who use video for collaboration, communications and marketing. (Source: Wikipedia)

¹⁰ Again according to the Kaltura report, 24% of the respondents stated that more than half of educators in their institution regularly incorporate video in their classes. As said in the report, “these results are very promising, demonstrating that the incorporation of digital video as a teaching aid is permeating the classroom although has not yet reached anywhere near saturation point.” In fact, a constant and regular use of videos might lead to a lack of interest towards this type of input. Videos are used as teaching aid by 83% of the respondents, and as supplementary course material by 67% of them. The most used type of content is free online videos: 97% of the respondents to the survey say they use them, and 73% of them say they use them frequently.

In the rank of sources for the videos used in class, the second place is occupied by licensed content, followed by teacher generated content, media team generated content, and lastly student generated content.

However, it is likely things will change soon: 95% of respondents say at least some students create or include videos in their work and 13% of respondents say more than half of students do so. It is a start. Moreover, 98% of the respondents agree that knowledge of video tools and technology are an important part of digital literacy, and 83% believe that in the future students will generate more video content during their education; this belief is even stronger among instructional designers, at 90%.

One last number we would like to point out is that of respondents who believe that video improves the learning experience: 93%, a 3% increase on an already high number if compared to the same data the previous year (90%), showing that trust in the power of videos is getting stronger.

These data highlights how, when talking about the use of videos in education, a distinction needs to be made: as learning activity, learners can *watch* the videos, or they can *make* the videos.

1.8.1 Watching videos as learning activity

Multiple studies have shown that video can be a highly effective educational tool (among the most recent, Allen, Smith, 2012; Kay, 2012; Lloyd, Robertson, 2012; Rackaway, 2012; Hsin, Cigas, 2013; Stockwell, Stockwell, Cennamo, Jiang, 2015; Brame, 2016), but why is it so? There are several reasons.

As we said, videos constitute a multisensorial input: they deliver information in both visual and audio form, so that the learner receives it through multiple channels, which makes the input strong and more likely to be processed and stored in memory.

This is related to the “cognitive theory of multimedia learning” of Richard Mayer (Mayer, 2009), which builds on the “cognitive load theory” of John Sweller (Sweller, 1988; Sweller, 1989; Sweller, 1994).

According to Mayer, working memory has two channels for information acquisition and processing: a visual/pictorial channel and an auditory/verbal-processing channel (Mayer, Moreno, 2003; Mayer, 2009). Each channel has limited capacity, but the combined use of the two channels maximizes working memory’s capacity and can facilitate the integration of new information into existing cognitive structures (Brame, 2016). Mayer reiterates this in a later work when he writes “The multiple channels of delivery, representation of ideas, and sensory stimulation provided by multimedia results in a higher cognitive activity, enhanced retention and understanding of content (Mayer, 2009).”

Moreover, multimedia materials are more efficient as teaching tools because they actively involve the learner in the co-construction of the meaning and assist the sense-making process through the activation of verbal and visual cognitive processes concurrently (Mayer, 2009).

Moving on to the discussion of content, it is clear why videos can play an important role in education: they give people access to people and places, taking them on virtual “field trips” without the need to move from the class; they can manipulate space and time, allow micro and macro views, slow motion, etc.; they can include historical footage and bring the past to life; they can show experiments and psychomotor skills, visualize otherwise invisible phenomena like in biology (Brame, 2016); they can tell stories and raise emotions and empathy (Hansch, et al., 2015).

In the field of language teaching, videos have been used for a very long time in the attempt to provide learners with an authentic input and allow them to get in touch with the culture of the target language without the need to travel abroad (South, Gabbitas, Merrill, 2008).

1.8.2 Making videos as learning activity

We saw that students are rarely engaged in learning activities that involve video production. This despite the fact digital literacy is acknowledged as very important and the importance of videos is believed to increase in the next future. Hopefully, this is going to change.

In 2007 the University of Lapland lead a study where the same course (Network Management) was developed in two versions: one with traditional frontal lessons, and one online. In the first one, the students together with the teacher produced three case studies videos to be used in the online course. The study wanted to investigate three aspects: if creating the videos activated a process of meaningful learning in students, if dealing with the case studies in the video would trigger meaningful learning, and finally which role videos have in students' meaningful learning in general. “The research indicates that both designing and producing, as well as solving the digital video supported cases, promoted especially the active and contextual aspects of the students' meaningful learning as well as the students' positive emotional involvement in the learning process” (Hakkarainen, Saarelainen, Ruokamo, 2007).

This is just a first study, but its results suggest that involving students in the creation of didactic videos has a positive effect on their learning of those contents, in addition to enriching their digital literacy.

1.9 Conclusion

Even though a unique definition of story cannot be provided, its main features can be identified as: a three-act structure, a conflict sparking the action, a protagonist undertaking a journey, a meaning that comes from the combination of what happens in the story and the interpretation given by the receiver, intention motivating the characters, events linked by causality.

Storytelling has played an important role in human evolution and shaped the way people think, to the point an input is easier to understand and remember when in story-form. This is even more true if that input allows the receiver to store it as images.

For these reasons, storytelling has been used as a learning tool for centuries. Stories are a meaningful, multisensory, rich, easy-to-process, enjoyable input, which becomes even more powerful if combined with multimedia technology.

A very effective format to deliver stories is the video, which in fact has been implemented in teaching and learning programs for decades.

Modern technology has cut the cost of production and allowed virtually everyone to create videos as long as s/he owns a phone with a camera. This has opened new possibilities for the use of video for educational purposes, allowing students to become not only consumers but also creators of their learning material.

Chapter 2.

DEVELOPMENT OF A STORIFICATION PROCEDURE

Considering the advantages storytelling can grant for communicating information (and this includes teaching), it does not come as a surprise that also non-narrative content can be fruitfully addressed in this form. The scientific discourse has often lent tools typical of narrative to make its message clear and easier to understand, and the same happened in language learning (2.1).

Nevertheless, a reproducible “formula” to create stories out of abstract content has not yet been devised, and here we make our proposal. After presenting its development process (2.2), a three-phase storification procedure is described (2.3). Additional theoretical support is also taken into account (2.4), and some conclusions drawn (2.5).

It is important to highlight the choice of the word “storification” to express the intention of this procedure to not only take advantage of storytelling, but also to fully commit to the creation of proper stories (with a beginning, a development and an end) able to convey the meaning of abstract contents.

2.1 Stories to deliver non-narrative content: Early attempts

After talking about storytelling as an educational tool (1.7), here we focus on the delivery of abstract concepts by means of stories. This overview summarizes what has already been done in this respect. Stories have been applied to teach mathematical and scientific abstract concepts, some examples of which are illustrated in the first section (2.1.1). The second section (2.1.2) is devoted to storytelling in language teaching, providing an antecedent to the storification procedure that is the focus of this chapter.

2.1.1 Storytelling for Mathematics and other scientific subjects

In the context of the teaching of abstract concepts, the most common use of stories is to provide a meaningful context to the content knowledge addressed: “It may be the *information* you want to communicate, but it’s the *story* that creates context and relevance for that information and makes it memorable” (Haven, 2007:97).

Mathematics is taught using a language that people often find difficult to understand and therefore discouraging (Solomon, O'Neill, 1998). A possibility to overcome this obstacle is to create stories that take a mathematical concept and places it in the real world, making it concrete.

A well-known and widespread example is the use of world problems to facilitate and give meaning to problem solving: they provide a real context, close to the learners' experience, and often a story, expressing the mathematical problem in a meaningful way. The so-called “river dilemma”¹¹, dating back to the 9th century, is an example of logical mathematical problem wrapped in a story.

“By engaging with the narrative, we place the mathematics in its context and personalise it, making it come alive to the conditions of the time. Context provides meaning [...] By narrating, we make use of our power to employ language to speculate about, enquire into, or interrogate that information” (Burton, 1999:32–33).

Other examples are offered by Gianni Rodari, who was a primary school teacher before becoming a writer. To teach the concept of sets (*insiemi*) he suggests telling of a chick which loses its mum and starts looking for her, asking other animals for information; it talks with several animals which do not belong to its set, until it finally finds her. Analogously, to teach reversibility we can invent a story about men being transformed into mice and then again into men. To explain possible and impossible additions we could tell about a man who, instead of catching the line 3 bus and then the 1, decides to take the line 4. To explain relativity, we could tell a story about a hippo befriending a fly: the hippo is a small one, and the fly is a big one, but still, the fly is smaller than the hippo.

From a cognitive point of view, these stories are very effective: they raise emotions, give concrete examples of abstract concepts, and at the same time they force the learner to reason logically to make sense of the proposed problem and situation (Rodari, 1973:133-134).

Rodari also adds that elements of an abstract topic can also be manipulated and transformed into characters, around whom the story is to be created. For example, we can invent a Blue Triangle character and tell about its search for a house, while travelling through the village of the Red Squares, that of the Yellow Triangles, the Green Circles and so on. Children are provided with information that is concrete and therefore can be understood “with their hands”, but they are also let free to use their imagination and “understand with their fantasy” (Rodari, 1973:132).

¹¹ Once upon a time a farmer went to a market and purchased a fox, a goose, and a bag of beans. On his way home, the farmer came to the bank of a river and rented a boat. But in crossing the river by boat, the farmer could carry only himself and a single one of his purchases: the fox, the goose, or the bag of beans. If left unattended together, the fox would eat the goose, or the goose would eat the beans. The farmer's challenge was to carry himself and his purchases to the far bank of the river, leaving each purchase intact. How did he do it?

To invent mathematical stories, all we need to do is let our imagination free and trust the story: “the story of the character is already in its name, the character is a symbol, and can evolve and acquire new, non-mathematical, meanings¹²” (Rodari, 1973:135).

This works also when applied to other scientific fields. An example is provided by English primary learning expert Graham Lowe (2006), who suggests inventing sequels of popular stories to leverage on children’s previous knowledge, while contextualising the information.

Here is an example, which engages children’ in a scientific type of reasoning: “Harry Potter and the snails of Doom - Professor Sprout is annoyed to find snails eating the mandrake plants and asks Ron to get rid of them. Ron knows that Hermione will be upset if he kills them, so he decides to keep them as pets. But what to give them to eat? Professor Sprout won’t let him have mandrake leaves, so Ron wanders around the ground of Hogwarts collecting leaves. This seems to keep them happy, but some leaves seem to disappear faster than others, and some don’t get eaten at all. Ron doesn’t know why, but Harry’s too busy with Quidditch practice and Hermione just tells him to figure it out himself. Can you help?” (Lowe, 2006:13).

Moreover, stories can work as substitute for direct contact with Nature and its manifestations. “Storytelling has potential as an alternative experience through which children can develop science concepts. Emotional, imaginative and analytical responses are used to create meaning in a form that children use spontaneously” (Bannister, Ryan, 2001:76).

An example many can be familiar with is the French cartoon series “Once upon a time ... Life” (French “Il était une fois... La vie”, Italian “Esploriamo il corpo umano”), which delivers factual information about human biology in the form of stories. The explanation of how blood circulation works, for example, becomes the story of the platelets’ long and perilous journey towards the heart, which includes witnessing epic battles between evil germs and good lymphoid cells before reaching a happy ending.

In a 2001 study, researchers observed the effects of teaching the water cycle in the form of a story titled “The Great Journey of William Water”. William Water was a droplet, with human physical features (tiny arms, tiny face, ...), emotions, thoughts. The story was orally narrated in class, interacting with the students and involving them in the telling with questions related to the target topic. After the story, they were asked to pick a section of it and write their own version. Three months later they were tested again to see their retention of the scientific information: nine out of ten children

¹² Original quote: “[...] la storia del personaggio è già nel suo nome, il personaggio è un simbolo, il personaggio può evolvere e acquistare nuovi significati, non matematici.” Our translation.

were able to explain the water-cycle in their own words, using factual rather than anthropomorphic reasoning, and only one student referred to water as “him” (Bannister, Ryan, 2001).

Anthropomorphic reasoning is incorporated into the story to encourage emotional response, but it does not hinder the learning of the factual information it conceals. What it does is allowing emotions and participation in the story on part of the learners. This is essential, as it contributes to the level of learning.

This and other studies (Mitchell, 1984:30, for sequences as weathering and change; Tamir, Zohar, 1991, for biological phenomena; Howe, Johnson, 1992, for conceptual cycles as electric circuits; Levi, 1996, for carbon cycle and metal extraction) show that children are able to decode a story involving anthropomorphic reasoning and use it to understand the idea itself in a factual/scientific way. If children can do it, we can expect adults to do the same.

In the review for this work it was possible to find two other cases of lexicon related to storytelling applied to the delivery of abstract concepts.

The first case is that of “mathematical narrative” (Burton, 1999). This term refers to teaching math concepts putting them in historical perspective, having learners understand that mathematical formulas are not dogmas, but products that have evolved over centuries (and could change again) thanks to the work of many scholars. Mathematicians are invited to teach the “who” in addition to the “what”. This does not mean betraying the subject, all the contrary: information is kept intact but the way it is delivered facilitates understanding and learning for everyone (Solomon, O'Neill, 1998). The second case is that of the “*narrativization* of science”. It consists in the application of literary tools and techniques to the scientific discourse. “Figures of speech are used in scientific discourse to enhance verbal translatability of abstract concepts” (Spinozzi, 2011). Metaphor is one of the most frequently used because of its high potential in scientific explanations.

Even though we recognize the value of these two ways to use storytelling for learning, we do not share their intent and do not find their approach straightforwardly applicable to the learning issues we want to tackle.

Informed by the examples we mentioned, therefore, we have worked out a different application of storytelling to enhance the successful learning of abstract concepts.

2.1.2 Stories in Language Learning

We will now focus on storytelling for the teaching of abstract concepts in language education, both as first and foreign language.

There are plenty of examples of stories used to contextualise the use of language. All of us have experienced them at some point: in primary school, when we read the story of the little bird which flew over the table, then under the table, then stopped on top of the table... to learn English prepositions; or during our first French class, when, to learn greeting expressions, we were introduced to the lovely Besson family who had the habit of greeting each other insistently after getting home from work or school. Narrative-rich literature and film have been used throughout the history of L2 teaching: in narrative-informed approaches using stories to contextualize L2 learning (Shrum, Glisan, 2005); in literacy-based approaches using stories to allow situated learning and transformed practice of the language (Allen, 2009; Allen, Paesani, 2010; Kern, 2000); in genre-based and awareness-focused approaches using a story-context as an organizing principle (Reinhardt, Thorne, 2011).

In this study, we will focus on the use of storytelling to convey information, as we saw with mathematics and sciences. We are not interested in stories to contextualise or exemplify, but rather we want to create stories able to depict linguistic abstract concepts.

We have gathered a list of examples of this type of use. Again, this is not a complete list, but an overview that exemplifies what has already been done in this field.

Examples of story used in language teaching:

- An Italian nursery rhyme, of unknown author, has been circulating in schools and later in teachers' blogs for years. It explains one of the uses of apostrophe in Italian: if a female article ending with a vowel precedes a female noun beginning with a vowel, the article loses its vowel and is substituted by an apostrophe. For example: “la uva” (the grape) becomes “l’uva.”

This nursery rhyme explains this rule as a story: “On a cloudy day / There was a big fight / among the words of a poem. / - We want to leave! - / The two vowels standing next to one another shouted. / - If we stay apart, we will look nicer! / - La oca, la uva, lo animale / Can’t you hear how awful it sounds? - / So one vowel moved away / and left one teardrop behind. /

This is why we write / L'oca, l'uva, l'animale / and that tear / was forever called *apostrophe*¹³.”

○ “The Secret Stories” (<http://thesecretstories.com>) is a project by Katie Garner, started in 2005 in North Carolina, USA. It aims to teach English phonetic rules and spelling with rhymes whose characters are letters and words; sometimes they do something (stories), sometimes they are simply described. English is a language with a low correspondence between written morphology and pronunciation of words, and often children ask why it is so. These stories reveal the mystery, telling of how English compounds came to be pronounced in a certain way, and that is why they are called “secret”. Unfortunately, only samples of these works are available online, while the whole stories are available on DVDs to be purchased. The series of books “Basher Basics”, which Amazon describes as “concept books for children”, cover several topics, including Grammar. They are all illustrated by cartoonist Simon Basher in collaboration with a different writer for each book.

In “Grammar”, written by Mary Budzik, the elements of language like Tense, Pronouns, Complex Sentences, ... are represented as characters, whose characteristics are consistent with the language element. Each drawing is complemented by a description of the character, investing it of human-like emotions and sentiments. Even though there are not fully developed stories, characters’ images and descriptions suggest a narrative.

○ There are several examples of videos about English spelling. A particularly interesting one is “Silent E”¹⁴, a musical mystery story, from the American television show “Between the Lions” which was broadcasted from 2000 to 2010 on PBS Kids. In this video, vowels are characters with a human body but a vowel letter as head. Silent E is a vicious character who terrorizes the regular vowels, and who loves going around town transforming things and tricking people: a child who is about to open a coke “can” is hit in the eye by a “cane”, a lion “cub” finds himself with the body of a “cube”, and so on...

○ “Comma story”¹⁵ is a video lesson on the use of the Oxford Comma written by Terisa Folaron, animated by Brett Underhill, and produced by TED-Ed in 2013. In this story, the comma becomes Comma, a nice little being, “always looking for some community service to

¹³ “In un giorno grigio / ci fu un gran litigio / tra le parole di una poesia. / - Vogliamo andarcene via! - / Gridarono le vocali vicine. / - Se staremo lontane saremo più carine! - / LA OCA, LA UVA, LO ANIMALE / Senti come suona male? / Così una vocale se ne andò / e una lacrima lasciò. / È per questo che da quel dì si scrive / L'OCA, L'UVA, L'ANIMALE / e quella lacrima che cascò / per sempre APOSTROFO si chiamò!”

¹⁴ The video can be found on YouTube. Link: <https://www.youtube.com/watch?v=1Yz7f5XJT20>

¹⁵ This video can be found on YouTube. Link: https://www.youtube.com/watch?time_continue=2&v=GHNl1O3NGJk

do”. During her daily walk, we see her helping Clauses and Conjunctions deal with their heavy duties.

- “Nessy Reading Strategy: ‘ed’ past tense”¹⁶ is a video published on YouTube in 2014. It tells the story of English suffix -ed, a moustached character who can travel in time but only when combined with a verb. It is more of a description than a fully developed story, but the narrative element is present. It is part of a video series belonging to “Nessy Program”, a special program designed to help children with dyslexia learn reading and spelling.

All these examples are examples of anthropomorphic reasoning applied to language abstract concept. They show that delivering this kind of information in the form of a story is possible. What is lacking is a replicable technique to create this type of stories. This is the object of the next section.

2.2 Development of the Storification Procedure

This PhD project was intended to be developed through “Design Thinking”. This term refers to creative strategies designers use during the designing process (Visser, 2006), and has been proven beneficial even when applied in contexts other than design, like business or education. Design Thinking aims to identify an innovative solution to a problem, while fulfilling three parameters: users’ satisfaction, feasibility, and economic sustainability.

The first part of this section (2.2.1) talks about the first phase of the design process, and the second one of the attempts (2.2.2) that lead to the storification procedure (described later in 2.3).

Since it was a journey the experimenter did alone, and for the sake of clarity, the writing of this part will be done in first person singular.

2.2.1 First phase of the design process: Identifying problem, users' needs, available resources

The project started with the aim to solve a problem: many Italians make basic mistakes when they speak English, despite having studied the language for several years at school and knowing well the

¹⁶ Link to the video on YouTube: https://www.youtube.com/watch?time_continue=1&v=jxl28KQOHy4

grammatical rules they break. How can we help them to correctly apply those rules during oral production?

A call for participation was disseminated through social channels, also requesting the availability for an interview. Thirteen people in their 20s and 30s volunteered to take part in the users' profiling. These volunteers lived in different Italian cities and had been enrolled in different types of school. They were representatives of the users this project wanted to help: young professionals who live in Italy, have studied English, have opportunities to use it daily, but are aware of making mistakes and do not feel confident about it.

They were asked about: their experience with English as students, at school and out of school; their experiences in using the language; their emotions and thoughts when getting in contact with the language, actively or passively; their expectations and desires regarding their competence and use of the foreign idiom.

This preliminary review, which is in total agreement with my experience as foreign language teacher, gave rise to the following observations:

- There is a strong connection between school experience and linguistic competence. People who had a positive experience at school seem also well-fitted and more interested towards the language, while those who had negative experiences struggle getting rid of negative emotions associated with the subject and tend to feel more anxious and insecure when using the language.
- Adult speakers of a foreign language tend to think that effective communication can be achieved even without accuracy and have high tolerance for mistakes "as long as the message goes through".
- At school it can be quite easy to get by, but when people enter the working world they realize their competence is not enough, and it is in that moment they feel the need to improve.
- Contact with English is substantial: people love listening to English music (even if often they do not understand it and need to look at the lyrics to know what they say), watch English-speaking movies and series (with Italian subtitles, sometimes with English subtitles), they sometimes read online articles written in English, and can chat or write emails in English.
- They feel quite at ease when listening to or reading English. They feel a little anxious when writing but can still manage it. It is when they have to speak that the walls go up: they can have a basic conversation, but often feel they "lack the words". They are aware they do not

know how to use many grammar rules, and above all they do not remember them while speaking, which blocks them in trying to go beyond simple constructions.

- They say they try and talk like “playing by hear”, trusting what feels right. The problem with it is that this often results in them using Italian constructions with English words, as a consequence of interference of the first language over the foreign language (Swan, Smith, 2001).

These observations were complemented by personal observations of three young Italian professionals who had just moved to the United States. I noticed that, even after two months living in an English-speaking country, they would keep on making basic mistakes, like forgetting to add -s to plural nouns or to 3rd singular verbs at the present tense.

In order to help solve this problem, the first thing to do was finding a list of common mistakes. This was provided by Michael Swan and Bernard Smith’s manual “Learner’s English: A teacher’s guide to interference and other problems” (2001).

The second thing was to see what was already available in terms of material to teach grammar rules. This search did not include school material but focused on the resources addressed to adult independent learners. Since many of the people interviewed said they use Google and YouTube to find answers to their linguistic doubts, the research started there.

I found that Google provides users with pages where grammar rules are explained in a very traditional way, like grammar books would do, or at best redirects users towards discussion forums where more expert and/or mother tongue speakers of English give advice on the use of the language (sometimes informed advice, sometimes simply based on personal experience)¹⁷. On the other hand, YouTube’s results can be grouped in two categories: one includes video tutorials where a teacher stands next to a whiteboard and explains the rule as s/he would do in class (generally boring and low-quality shot), a second includes animated explanations clearly aimed at children.

This research made clear that effective stimulating learning material for adults is lacking. This does not mean there are not good quality resources for people who want to learn English independently online. Platforms like Duolingo, for example, provide learners with a responsive and well-designed environment where a language can be learned from scratch. However, it obliges users to follow a

¹⁷ Google search has been proved to be an effective tool in the context of autonomous learning, especially as concerns lexicon and structure construction (Kvashnina, Sumtsova, 2018), but finding the most appropriate or specialized answers entails a high level of information literacy, and this is not always the case with autonomous learners. Hence, in this study we tried to replicate the behaviour of average adult learners, because it is their learning needs that we aim to address in particular.

progression, and learn a language starting the course from the beginning. Users have to work their way through the course, going from one unit to the other. They can skip them by having their pre-existing notions tested, but they still have to respect a sequence to access learning units.

The intention of the present project was to allow users with already a basic knowledge to work independently and become able to “fix” their own mistakes, leaving them the freedom to choose what to address and when.

Moreover, grammar explanations in the analysed online resources always came in a traditional format: definition of the rule followed by an example. The definition itself, though, can be too abstract to people who are no longer in school and might have forgotten the meaning of basic concepts like “pronoun”, “verbs”, etc.

It was interesting to see that the resources aimed at children had something that lacked in those addressed to adults: pleasantness. Children materials tended to be more imaginative and creative, designed to be fun and enjoyable. Why adults have to be doomed to boring, dull material? The brain adapts and changes over time, but it is unlikely that it adapts to be activated by dullness when we grow up. This highlighted the need for a change in format: also adults’ learning material should be enjoyable and easy to understand.

The most enjoyable and understandable input format for the human brain is story (as explained in 1.3), while the favourite format for online information gathering seems to be videos (1.5). Therefore, I decided to try delivering information by using video stories and evaluate the effects on learning. The objective, however, was not to create a number of learning materials for adults, but also, and especially, to design a process, a procedure, that could be used by everybody to create effective learning materials for independent adult learners.

2.2.2 Second phase: Brainstorming ideas, developing and testing prototypes

The first mistake I decide to target was the missed addition of suffix -s to verb conjugated at the third person singular in the present tense. Thinking of the mistake and its related rule, I invented a story. I kept a diary during its creation and later I analysed it to identify the mental reasoning that had led to the result. The outcome was the following sequence (“Sequence 1”):

1. Find one action in the rule and/or the mistake that can be described with a generic verb (seed of the story)
2. Identify elements involved in the action (they will be the characters)
3. Define characters’ features on the basis of the action identified in 1 (estrangement - association - metaphor)
4. Basing on what has been elaborated, define the essential structure (A does this and B does that...)
5. Enrich structure and create new story.

This sequence was in part inspired by two techniques that Gianni Rodari describes in his “Grammatica della Fantasia”: a technique to create riddles, and one called “fiabe a ricalco” (retracing fairy tales, Rodari, 1973:67).

The first technique consists of three steps: “straniamento”, “associazione”, “metafora” (1973:49). The “straniamento” (estrangement, Rodari, 1973:21,97) consists in extracting an element from its usual context and considering it only for its features; it was in turn inspired by Russian writer and critic Viktor Sklovskij and Surrealist painter Max Ernst (“systematic estrangement”). The following step, “associazione” (association), consists in considering those features and finding another item or being which possesses them, therefore creating a metaphor (“metafora”).

The second technique, “fiabe a ricalco”, is used to create new stories from old stories. To this end, it is necessary to identify the essential elements of the old story, and replace the names of the characters with letters (A, B, C, ...) and their actions with generic actions. A new story is then created by “re-dressing” this structure.

Sequence 1 was then tested on other grammar rule-mistake pairs, but it did not seem to be productive for any type of rule. An analysis of the difficulties encountered led to change the first step: instead of simply identifying one action in the rule/mistake, it was necessary to identify a *key* action defining and keeping everything together, as shown in “Sequence 2”:

1. Find one key action in the rule and/or the mistake that constitutes its/their core of meaning (seed of the story)
2. Identify elements involved in the action (they will be the characters)
3. Define characters' features on the basis of the key action (estrangement - association - metaphor)
4. Basing on these initial steps, define the essential structure (A does this and B does that ...)
5. Enrich structure and create new story.

Again, the sequence was tested on other grammar rule-mistake pairs, and again it was not sufficiently productive: it was necessary to distinguish if it had to be applied on a combination of grammar rule plus mistake, or on the grammar rule alone. It appeared necessary to have two different sequences, for these two different cases.

Working on grammar rule only:

1. Find one key action in the rule ~~and/or the mistake~~ that constitutes its core of meaning (seed of the story)
2. Identify elements involved in the action (they will be the characters)
3. Define characters' features on the basis of the key action (estrangement - association - metaphor)
4. Basing on what has been elaborated, define the essential structure (A does this and B does that...)
5. Enrich structure and create new story.

Working on grammar rule + mistake:

- | |
|---|
| <ol style="list-style-type: none">1. Identify elements in the rule and in the mistake2. Compare them, and see which ones are present in both, which ones differ: they will determine the conflict.3. Codify the conflict in a generic verb4. Thinking of the characters, turn that generic verb into a specific action5. Build story around this specific action (conflict) |
|---|

The two structures were tested. Having two separate sequences worked, but there was still something missing. The fact that the ideas for the stories would come starting sometimes with characters, other times with the key action suggested that the idea of sequential steps needed to be challenged.

Therefore, I decided to create two phases, that had no pre-set sequence (the process could start with one or the other).

One phase consisted in creating *characters*, which are essential for all stories. Inspired by the previous attempts at delivering non-narrative concepts in narrative form, it was decided this procedure should involve “anthropomorphic reasoning” (2.1.1). This means the characters of the story would have had to be “anthropomorphic renditions” of the elements making the abstract concept.

Rodari’s approach (estrangement - association - metaphor) was retained but with the obligation of creating human (or human-like) characters.

The other phase consisted in finding a *key action* able to encode the relation among the elements in the grammar rule and finding a manifestation of it in the real world.

The two phases are complementary: characters and actions are both necessary to have a story.

<p>CHARACTERS</p> <ol style="list-style-type: none">1.1 Identify the elements of the grammar rule/mistake1.2 Identify their characteristics1.3 Create (anthropomorphised) characters showing those characteristics	<p>KEY ACTION</p> <ol style="list-style-type: none">1.1 Identify the relation connecting elements in the rule1.2 Brainstorm about it (write all the adjectives and verbs that come to mind when looking at the grammar rule/mistake)1.3 Identify actions expressing those relations in real world
<p>CORE OF THE STORY</p>	

Fig. 1 – The first official attempt in the process of designing a storification procedure (it was later tested and proved to not be satisfactory)

This procedure did not yet result satisfactory because often the key action was the same for several mistake-rule pairs. For example, the key action “A is used in place of B” (mistake) or “B is wrongly substituted to A” (mistake) could work both for the Past Continuous being mistakenly used in place of Present Perfect Continuous, or the auxiliary “to be” being used in place of “to have” in the Present Perfect. Another obstacle was the fact that it was not clear if the process was to be applied to the rule or to the mistake, and how the two would interact.

Working just with and on words can be tricky. I wanted to guide learners to create mental images out of textual grammar rules, hence I oriented the process in the direction of creating a *visual metaphor*. It was fundamental to give abstract concepts a visible body, be it human or other, because they needed to be made visible. It was necessary to include a step guiding to create an image (i.e., visualizing the concept). Performative storytelling and narratology provided some help in this respect.

Contemporary performative storytellers active in the “Storytelling Revival” cultural movement have several, sometimes hundreds, of stories in their repertoire and tell them improvising the words when they perform in front of an audience (Balbi, 2013; Odangiu, 2017; Zampolli, 2017). They memorize stories not as words, but as images: each tale corresponds to a sequence of very detailed canvas, which serve as memory anchors. The storyteller can recall the images related to a specific story and weave the narration out of it on the spot, making every performance unique.

Along this line, rule visualisation was achieved by identifying the elements and their characteristics (estrangement), and then visually translating them in the human world (comparison, metaphor). Just one image, however, was not enough.

From the point of view of Narratology, a story is made of one or more Events, and each Event is the transition between two "States-of-things" differing by at least one feature (Tornitore, 2014).

The problem with this first version of the process was that it created only one State-of-things. A second one was needed in order to have action (and therefore the seed for a story).

I kept the idea of the State-of-things as a reference, but I decided to focus on the creation of *images* rather than States, so as to define the starting and ending moments of the story.

So far, the process had proved fit to create one Scene: one image which was a visualization of the rule. This image needed to close the story: it had to be the final image that sticks with the learner. In order to have a story, a second Scene was needed (in the next section I will explain how).

Finally, I devised two slightly different procedures for working on the rule only or including the mistake.

Before describing the final version of the storification procedure developed (which I will do in the next section, 2.3), it is important to explain why it was considered a satisfactory result.

The two versions of the storification process, with and without an associated mistake, were tested on several grammar rules and proved to be effective. Applying them, it was possible to create several stories.

The stories produced can be used in textual form, but for many reasons (see 1.5 and 1.8) I deemed preferable to create scripts out of these stories, and then produce them into videos.

The efficacy of these videos as learning material needed to be tested, and Chapter 4 describes the testing of the videos on adult independent learners.

However, the process can actually be used as learning support also in a different way, i.e., by school teachers guiding their students to create such stories, with the aim to support understanding and memorization of grammar rules. Chapter 5 focuses on testing the storification process in the classroom. A framework for both tests is provided in Chapter 3.

2.3 Description of the Storification Procedure

Here is a detailed description of the final version of the storification procedure. I will focus on the storification of the grammar rule only first (2.3.1), and then on how to include the mistake (2.3.2). The first will be exemplified by the story “Speed Dating”, which was the first realized with it, and the second by “To Be Forever Alone”, another one of the stories created with this procedure.

2.3.1 Grammar rule only

This version of the procedure is exemplified by “Speed Dating”. It tells the story of a guy, Verb+s, who takes part in a speed date night, and meets several possible partners (the pronouns). Things do not go very well for him, until he meets She, a girl with whom he amiably converses. When the date night is over, Verb+s decides to ask She if they can see each other again. She agrees enthusiastically and then introduces Verb+s to her friends: a guy, He, who is holding a stuffed animal, named ‘It’. They start chatting and the story ends with the four happily together.¹⁸

¹⁸ The video can be watched on YouTube. Link: https://www.youtube.com/watch?v=_PK86pWaEJY

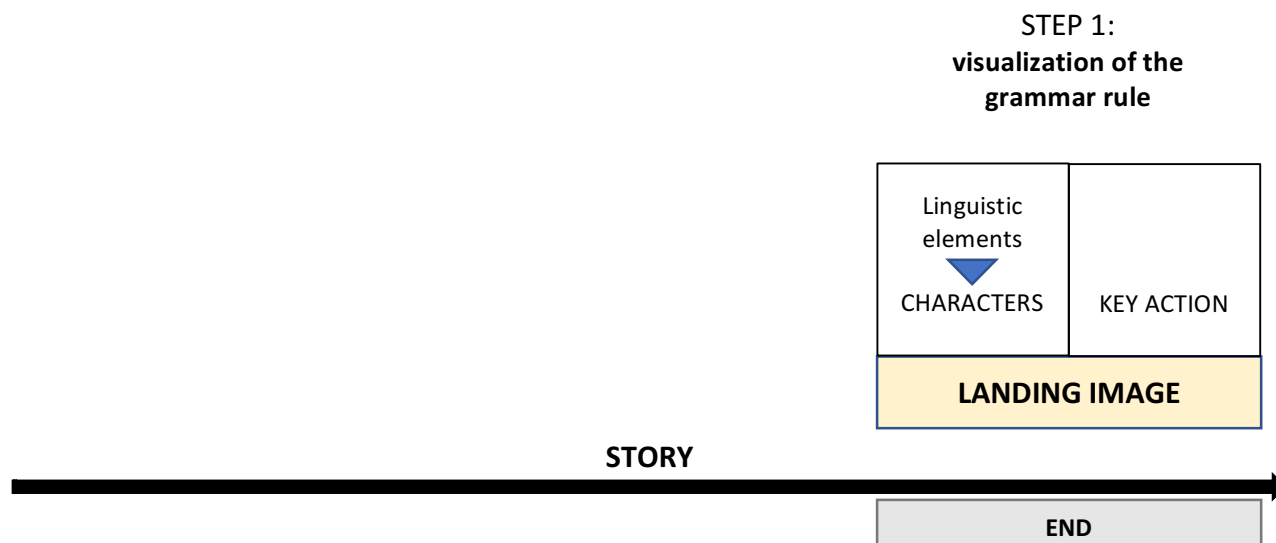


Fig. 2 - Storification procedure of grammar rule - First phase

The first phase of the procedure consists in visualizing the grammar rule and turn it into an image (Fig.2). We do so by identifying the linguistic elements of the rule: they will become our *characters*. In “Speed Dating” the linguistic elements involved are Verb+s and the pronouns I, You singular, He, She, It, We, You plural, and They.

Second, we must identify what traits those elements have and shape the appearance and the personality of the correspondent characters. To do so, it is useful to write a list of adjectives for each element, then choose two or three and use them to create a character which can embody that element. We also need to identify one key action that puts the characters in relation with each other and is apt to embody the grammar rule we are working on.

The characters do not need to be human, but can be animals, objects, or anything else. However, they need to be anthropomorphised in order to be granted agency, a fundamental trait of characters.

We can characterize elements in many ways. For example, I is pictured as a self-absorbed woman, who cannot stop taking selfies. Moreover, if they are linguistic elements which share the same category, so do their characters. In “Speed Dating”, for instance, all pronouns are female (with the exception of You, genderless), while Verb+s is male.

The result is a static image we call *landing image*, encompassing how many details we want (as long as they are functional to the delivering of the rule), and which is a visual metaphor of the rule. In the “Speed Dating” example, the final image shows Verb+s in the sole company of She, He, It.

The story-creation process does not end here but goes on with other two phases.

**STEP 2:
visualization of what was
before the grammar rule**

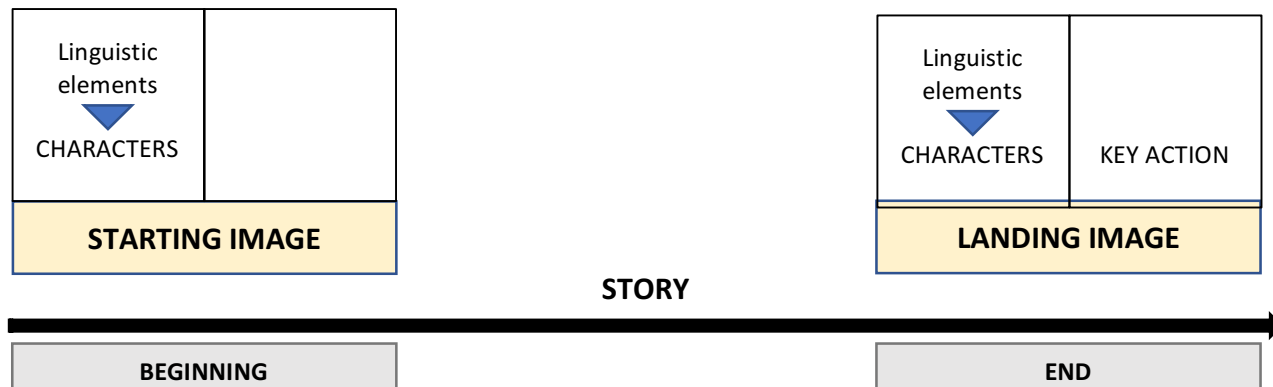


Fig.3- Storification procedure of grammar rule - Second phase

The second phase consists in creating another scene which will serve as beginning of the story, what we call *starting image* (Fig.3).

If we are working on the grammar rule only, we can draw inspiration from traditional Creation stories (“Once upon a time there was Chaos...” followed by the story of how things came to be) and start the story with an empty space: all the elements are present but not in the correct order and/or not yet connected. The starting image and the landing image differ because in the latter the characters are acting according to the grammar rule, which means performing the key action (in the case of “Speed Dating”, Verb+s is happy with She, He, It only), whilst in the initial scene they have yet to meet and/or find the right thing to do. In “Speed Dating”, the beginning scene is Verb+s by himself, he still has not met his pronouns.

**STEP 3:
connecting the two images
with events**

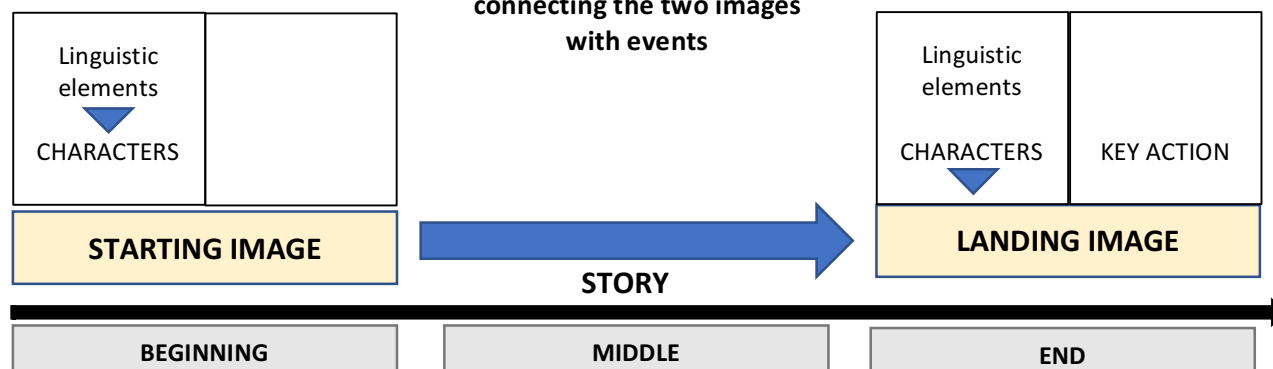


Fig.4- Storification procedure of grammar rule - Third phase

The third phase consists in connecting the two images. In order to go from the starting to the landing one, something needs to happen. This implies that the characters are to be involved into *actions*. The complete process is represented in the scheme (Fig.4).

It is important not to introduce characters which are not related to the rule, in order to avoid distraction and confusion. These stories do not need to be very long: the sharper they are, the more effective. The best choice is to make them ironic or to present unusual situations, providing the learners with a memorable input.

2.3.2 Grammar rule and mistake

Conflict and unexpected situations are essential elements of stories, that contribute to make them meaningful and interesting (as mentioned in 1.2). If the grammar rule we are working on can be associated with a mistake commonly made by learners, this gives us the opportunity to address the issue by incorporating the mistake into our story.

In this case, the story starts with both the characters associated with the rule and those associated with the mistake. Obviously, those associated with the mistake are the antagonists. In order to create antagonists, we apply the same visualization process to the elements of the mistake and turn them into character. Then, we need to identify which disruptive action such characters perform, causing some problem, and turn that into the conflict of the story.

In this case, we use the word “conflict” not necessarily as a synonym of “battle”, but as it is used in Narratology, that is, in the sense of “competition”.

The process is represented in the scheme (Fig.5).

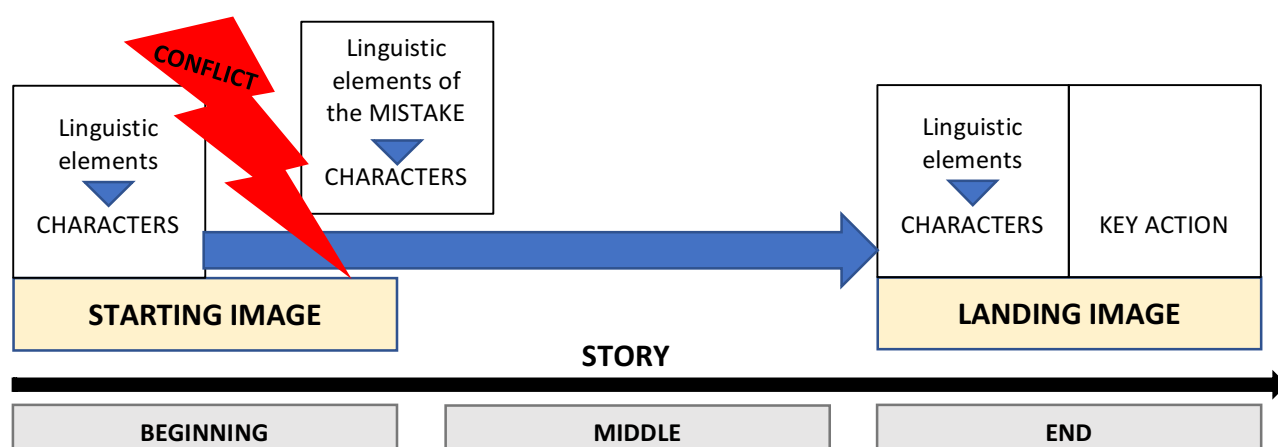


Fig.5– Scheme of the storification procedure incorporating the common mistake associated with the target grammar rule

Here is an example. In English the active form of the Present Perfect always requires the auxiliary verb “to have” combined with a Past Participle. The corresponding Italian tense can use either “to have” or “to be” as auxiliary, and so Italians tend to (incorrectly) use both auxiliaries in English, mimicking what they would do in Italian. This rule was transformed into a story where two guys (the auxiliaries To_Have and To_Be) try to court two girls (Past_Participles), but only one of them, To_Have, succeeds while the other, To_Be, is left alone at a cafe.

The character(s) embodying the mistake can be part of the starting image or they can come into action later in the story. This means the conflict can be hinted from the beginning or it can appear later, then becoming the action centre.

Lastly, a very important remark: these stories can be funny, even ridiculous, because we remember better something we have enjoyed. They can also be stereotypical. There is no need for psychological depth in these characters.

The aim is that of exploiting our prior knowledge by proposing stories that are simple to codify because similar to so many other stories we have seen or heard.

2.4 Theoretical discussion of the storification procedure

In this section we want to give reason for some of our decisions in the design of the storification procedure described in the previous section. We also want to highlight how it can benefit learners.

❖ Ideological theoretical approach to education

This process has been developed in a precise ideological framework of education: the humanistic-affective approach taught by professor Paolo E. Balboni at Ca' Foscari University in Venice.

Balboni was a student of Giovanni Freddi, who firmly believed in the value of a multisensorial input when it comes to language teaching, and in an active involvement of the student in his/her learning process.

Freddi was part of the Italian cultural revolution of the Seventies, when the world of education was impacted by ideas connected to a new conceptualization of the student: not a vase to fill, but a whole human being, with a personality, likes and dislikes, emotions, ... that needed to be taken into account in order to make real learning develop.

Balboni says that in order to trigger meaningful learning the learner needs to find pleasure in what s/he is doing, in the input s/he is receiving (Balboni, 2002). This claim is based on several neuroscientific research studies which prove that the amygdala and the whole limbic system are heavily involved in the information acquisition and memorisation process (Daloiso, 2009). He joins a large group of researchers who share the same beliefs; among them are Stephen Krashen with the “affective filter” hypothesis (Krashen, 2013), and John Schumann with the theory of the “stimulus appraisal” (Schumann, et al., 2004).

❖ Comparison with Digital Storytelling

Another relevant theoretical background of our proposal is Digital Storytelling (DS). The storification procedure and DS’ guidelines share some similarities: focus on the content (“Although facilitated by the technology the form is not driven by it and the primary focus for digital stories is traditionally the script”, Boase, 2008:1); the short length of videos (suggested length in Digital Storytelling is two and a half minutes or less); the three-act structure (“The importance of having a story at the heart of a digital story – with a beginning, an end and some development and interest between those points – is vital.” Boase, 2008:2). There is also a sort of parallelism between the Seven Steps of Digital Storytelling (Lambert, 2010) and the proposed storification procedure.

However, there are also several differences: DS requires voiceover, while our storification process gives it as an option, not as mandatory; moreover, and foremost, the content differs greatly. We stress this to underline that the proposed storification procedure is not intended to be an activity of Digital Storytelling.

❖ In favour of storifying abstract concepts

Research confirms the effectiveness of stories to teach “tacit knowledge” (Nonaka, Takeuchi, 1995), that is, knowledge which is difficult to articulate, like values, beliefs, cultural norms (Taylor, 1989; Dalkir, Wiseman, 2004; Sole, Wilson, 2004).

Grammar rules are not really “tacit knowledge” but rather “procedural knowledge”. However, they share with tacit knowledge not being “declarative” and have an abstract nature that makes their verbal expression difficult to conceptualize even by people who own and use them.

This is exactly why it is important to make this knowledge concrete, substantial: to facilitate its being stored not only as a semantic memory (a reservoir not immediately available) but also as a declarative memory, so that it can be swiftly and consciously retrieved. This is particularly important in the case of adult learners: their critical period for language learning is over, they cannot acquire a new

language naturally as in childhood and need to rely on their explicit/declarative memory. Therefore, it is important to find a way to support grammar rules so as to make them more readily available. A proof of this comes from the world of memory champions, who apply techniques to make abstract words concrete in order to be able to remember them (Foer, 2011:91): they do so by creating images. Moreover, the storification process not only makes abstract concepts tangible but does so by shaping them into the easiest form for our brain to process: stories (1.3.2).

In other words, the storification process takes a kind of memories our brain is not good at holding on to and transforms them into a kind of memories that results natural for our brain.

2.5 Conclusion

In this section, a proposal to create stories out of abstract content has been presented. It aims at using story-form to deliver the content, since that of stories is the structure that is easier to understand for humans, and it also aims at a visualisation of the rule.

The reasons for this are those we discussed (giving the abstract concept substantiality), but also because our memories and thoughts are translated in our brain into images (1.5).

This is what metaphors have been doing for centuries in science, and the reason why they have been used from Darwin on. Scientists observe the world, the real world and then codify their observations into formulas, but in between there are metaphors. As Bruner (1986:49) says, metaphors “are crutches to help us get up the abstract mountain.” Then, when we get on top, a formula takes the place of the metaphor, but without it the climb would have been way harder.

This works because “The best way to get acquainted with a new concept is through an old one” (Hoorn, 1997:4) where “old” means “already known.” For example, if someone wants to learn about elementary particle physics and does not know what ‘quarks’ are, a basic understanding of it can be formed by presenting quarks with the familiar concept of building blocks (Huang, 1992).

This is why creating a story starting from a visual metaphor helps: we provide learners with a familiar concept they can use as a ladder, a stepping stone towards the abstract concept that is their target.

It is important in the stories that characters are human or have human-like features for two reasons. First, they need to be granted agency in order to be perceived as characters (they need to be able to act, which means move, speak, think, ...). Second, if they are human or human-like, learners can empathise with them and understand what they do.

Tests led on children have proved that they can understand science stories which use anthropomorphism to give human characteristics to non-human objects, and that they keep their ability to distinguish between them and factual reasoning (Bannister, Ryan, 2001). We can therefore assume that adults can do the same.

Chapter 3.

METHODOLOGICAL STANCE ON LANGUAGE LEARNING AND TESTING FRAMEWORK

In this chapter we provide the theoretical framework that inspired the procedure design and testing. Section 3.1 describes some theories and research on language that underlie this work, while Section 3.2 focuses on teaching approaches and theories.

As already said in 2.4, this work is grounded in the humanistic-affective approach, as taught at the university of Venice by Paolo E. Balboni. There have been other approaches and methods which have addressed the use of technology in education in a specific way and that could frame this work, but Balboni's humanistic-affective constituted the background for the whole development of the storification procedure and therefore it is the focus of the discussion here¹⁹.

In Section 3.3 the possible applications of the Storification technique are presented. Finally, Section 3.4 provides a description and summarizes the research methodology used for this work.

3.1 Language and language learning

Language theories and neuroscience have been companions on the long (and still developing) journey towards the discovery of the mechanisms of language.

Paul Broca (1824-1880) can be considered the initiator of neurolinguistics. Even though the French neurologist was not the first researcher to get involved with this subject, it was his work which carved a space for linguistics in scientific research.

Broca lead post-mortem studies on patients who in life suffered lesions on the third frontal left circumvolution of the brain and consequently lost their ability to produce language. These led him to discover (in 1861) that area was strictly connected to linguistic production. It is now known as Broca's area, and subsequent studies have confirmed it is the brain area associated with language production. A few years later, German neurologist Carl Wernicke (1848-1905) studied patients who were affected by deficits in language comprehension and located linguistic comprehension in the back portion of the temporal left lobe. That area is now known as "Wernicke's area" (the discovery is dated in 1874).

¹⁹ Other works related to the use of technology in education and used as reference are discussed in Chapter 1 – Theoretical Framework.

Seeing that both linguistic areas were located in the left hemisphere, for many years this was the hemisphere considered to be dominant, because “rational”. Several scholars (among whom Lev Vygotsky, Wilder Penfield, Aleksandr Lurija) did not agree with this, and supported the idea of both hemispheres being involved in language and in other cognitive processes. The 1970s experiments on split-brain patients, and successive research, proved them right (Fabbro, 2004), while also leading to the discovery of three mechanisms that became very important in the educational field: lateralization, bimodality, and directionality.

- Lateralization

It was discovered that the two hemispheres work by applying different strategies to process information: the right hemisphere is global, simultaneous, analogical; it acknowledges stimuli holistically and processes information synthetically; the left hemisphere is analytic, sequential, logic; it acknowledges stimuli analytically and processes information serially (Balboni, 2002:31).

- Bimodality

The two different strategies applied by the hemispheres are complementary, and both hemispheres are involved in the processing of any input.

- Directionality

The processing of input starts in the right hemisphere, where information is holistically processed, and then goes to the left hemisphere, where it is analysed in detail.

In light of these mechanisms, it is right to say that the whole brain is involved in cognitive processes, language included.

Several research studies have confirmed this, highlighting that each hemisphere contributes to cognition according to its own modality: the right hemisphere processes linguistic items holistically, and relates to contextual and connotative aspects of the linguistic stimuli (Winner, Gardner, 1977; Foldi, Cicone, Gardner, 1983; Millar, Whitaker, 1983; Danesi, 1988; Danesi, 1998), while the left hemisphere organizes and interprets discrete items, taking into account the denotative, logic and syntactical aspects (Dennis, Whitaker, 1976; Schnitzer, 1978; Paivio, Begg, 1981; Segalowitz, 1983; Danesi, 1988; Danesi, 1998).

These findings in the field of neuroscience can inform language teaching by pointing out that the learning inputs provided should involve both brain hemispheres (bimodality principle), starting with the right hemisphere (directionality principle). In other words, the best input should address emotions and multisensoriality first (Balboni, 2002).

Storytelling can do exactly this since it can stimulate both the analytical, structured thinking of the left hemisphere and the creative, holistic one of the right (Petrucchio, 2008), and even more so if it is to be delivered as a video, i.e., an input involving several senses. In other words, video stories are a means to involve positive emotions from the beginning of a learning activity.

Research in the field of the neurosciences also provides precious information on how the age of the learners influence their ability to learn languages.

Neurons are organized in clusters; some are biologically programmed, and some are the result of the environment (we already mentioned the plasticity of the brain and how neurons that “fire together, wire together” in 1.4). These clusters are called “neuro-functional modules”, and aim to successfully coordinate human activities, language included (Daloiso, 2009:20).

There are supposedly four neuro-functional modules for the mother tongue, which are distributed on both hemispheres: the first module corresponds to Broca's and Wernicke's areas, and governs linguistic production and comprehension; the second module is linked to explicit memory and concerns metalinguistic competence (rules' competence); the third module is located in the right hemisphere's cortex and is associated with pragmatics; the fourth module comprehends limbic system's cells and relates to emotions (Daloiso, 2009:27).

According to this theory, learning a second language involves the creation of neuro-functional sub-systems, specific for the new language, inside each neuro-functional module already existing of the first language.

This process is influenced by several factors, among which is the age of the subject: after a certain age, humans lose the ability to acquire²⁰ language (not “to learn”: the ability to learn a language is maintained throughout one's life). This happens because during childhood the brain goes through several phases of development, and this affects everything, included its ability to acquire language. What was once called “critical period”²¹ has been found to correspond to three different periods: from one to three, from four to eight, and after nine years of age (Daloiso, 2009:100). If someone who is nine years or older is exposed to a language, s/he will still be able to develop (even high) proficiency in that language but the brain areas s/he will need to activate to use it will be wider than those s/he needs for his/her first language. Strong motivation and constant use of a second language can lead

²⁰ According to Balboni (2002), “acquisition” (acquisizione) is the process of interiorizing a language, to the point of being able to instinctively judge a construction as well-formed or not, without doubts; while “learning” (apprendimento) is the process of learning about a language, even to the point of high proficiency, but lacking that intuitiveness typical of the mother tongue.

²¹ The critical period used to be considered as one block, but research has discovered that neuro-functional modules have different timings, and we should think of the “critical period” as a continuum of time periods (Fabbro, 2004; Daloiso, 2009).

towards a “sub-systems neuro convergence”²² (Gullberg, Indefrey, 2006; Daloiso, 2009:32,34), but it will still remain a “learned” language, unlikely paired with the same level of proficiency of the mother tongue.

This explains why it is hard for teenagers and adults to get proficient in a second language, and even more so in a foreign language.²³

Neuroscience tells us also something more. If language is acquired during the first or second phase of the critical period, the elements belonging to the second language are stored as those of the first language, making it possible to access the sub-systems without translating. On the other hand, if a language is learnt after the end of the critical period, all its elements are stored in the open-class store, even if they are close-class words²⁴. This means they are not automated, and this is what makes their use difficult. At the same time, it means that we can work on our explicit memory to strengthen the presence of said language elements there, which will make convergence possible if opportunities for consistent application are provided.

3.2 Teaching approaches and theories

The humanistic-affective approach constitutes the background for this work. It has some defining characteristics, which spring from the ideological perspective on education that spread in Italy in the Seventies.

❖ Focus on the learner

The learner is no longer a vase to be filled, but a human being who must be enabled to take control of his/her learning and cognitive processes. S/He is a human being, with emotions and mechanisms that are common to all human beings, but also an individual, with personal preferences, likes and

²² This convergence consists in a progressive alignment and overlapping of the sub-neural system processing the second language with the neuro systems processing the first language. It explains why someone who moves to a new country finds speaking the new language very hard and very tiring at the beginning, but finds it easier and easier as time passes: at the beginning, wide brain areas are activated to process language; then, practice and motivation to learn (because there is need to speak the language) accelerate the re-setting of neural paths related to the second language and progressively automate the processes, ending up activating less and less brain areas and therefore needing less energy.

²³ A second language is a foreign language learnt while living in a country where that language is spoken; it is the case of immigrants who move to a new country and learn the local language. A foreign language is a language that is not spoken in the country where the learners live while learning it, like English for Italian teenagers who study English at school in Italy (Balboni, 2002).

²⁴ An open-class contains content words, that is parts of speech that accept new members. The open classes in English are nouns, lexical verbs, adjectives, and adverbs. In contrast, the close-classes are those that do not really accept new members. They are the structural parts of the speech. The closed classes in English include pronouns, determiners, conjunctions, and prepositions.

dislikes. Each life is different, each human being is different, and therefore each learning path is different.

Moreover, learners must be provided with the tools to learn how to learn in addition to simply learning the content.

❖ Neurosciences are allies

In the second half of the XX century, technology has allowed researchers to discover more and more on how the human brain and the human body work. These findings must be taken into account by education specialists, since they are dealing with human beings. This is true for cognitive processes but also for emotional ones.

Emotions must be taken into account because they have physical manifestations and affect the way we think as well as the way we process information.

Neuroscience, which one might think to only focus on the study of the brain, has actually provided reasons in favour of a holistic understanding of the learner.

❖ Positive emotions

It is necessary to charge the linguistic input with positive emotional value in order to make it meaningful for the learner and have the brain incorporate it without difficulties. Negative emotions lead to a block in information processing and therefore memorization, and are overwhelming obstacles in the process of learning something. On the contrary, motivation combined with positive emotions is a powerful ally towards successful memorization.

Balboni combines the humanistic-affective approach with the communicative approach, which means he states that language teaching must take into account also sociolinguistics, pragmalinguistics and intercultural competence. Languages are meaningful to learners as communicative tools, something that allows them to achieve their goals in life, be they travelling, working abroad or with foreign people, finding a foreign boyfriend or girlfriend, or whatever else. Accordingly, Balboni claims that communicative competence is the goal of language education, and describes it as made of three different competences: linguistic competence (knowledge of phonology, phonetics, morphology, syntax, semantics of a language); extralinguistic competence (which translates in the ability of producing and receiving messages, and includes knowledge of gestures, prossemics, clothes, meaning of objects); contextual competence (sociolinguistics, pragmalinguistics, cultural and intercultural knowledge) (Balboni, 2013).

In this work we will focus on the linguistic competence, and specifically on the knowledge of grammar rules belonging to the foreign language.

Balboni highlights that grammar rules are “generative mechanisms” (“meccanismi generatori”, Balboni, 2007): in order to help students to achieve a fully developed competence on a language, it is necessary to teach them to observe the regularities in a language, analyse them, understand them, and locate them. Balboni’s student Maria Cecilia Luise (Luise, 2004) provides a detailed five-step description of how to lead this linguistic reflection process in the classroom:

1. Hypotheses making: The learner is shown several textual and/or oral inputs, asked to observe them and spot regularities.
2. Hypotheses verification: With peers or individually under teacher's guidance, the learner is invited to search for other examples of the noted regularities.
3. Rules’ spotting: The rules are identified and practiced through a series of exercises (ex. text with blank spots to be completed).
4. Rules' practicing: Active and autonomous application of the rules in open and communicative exercises.
5. Reflection on the language: Metalinguistic reflection on the language mechanisms and settling of explicit knowledge of them.

This approach is more effective than simply presenting the rules and asking students to memorize them, for several reasons: learners are actively involved in a process of discovery, their brains are activated and hence they will likely remember the experience; students are stimulated to learn not only content knowledge but also “how to learn”, developing a line of reasoning they can also apply in other fields.

The approach shows that a language is not a complex, inexplicable blob, but a system with regularities, and therefore it can be “disentangled” and recomposed; it shows that a language is not simply a sequence of words, so as speaking a foreign language entails more than translating word by word from language A to language B.

The proposed Storification process has been conceived to work along these lines:

- in the case of independent adult learners who watch the grammar stories, it forces them to de-construct the story to identify its elements, compare those elements with their knowledge of linguistic items in order to recognize them, and finally re-build the grammar rule that is hidden in the story;

- in the case of school students who create grammar stories, it actively involves them in de-constructing a grammar rule in order to convert it into actions, and then reconstruct it to form a story.

The results we aim to are...

- ... in the case of independent adult learners:
 - to enhance their understanding of the grammar rule;
 - to strengthen their memory of the grammar rule (also by providing multisensorial memory hooks);
- ... in the case of school students:
 - to guide them to (re)discover the grammar rules;
 - to build a strong memory record of the grammar rule in their mind;
 - to lay the foundation for metalinguistic reasoning and understanding.

In the case of our target learners, it is not possible to talk about “acquisition” because they are well past the closing of their “critical period”, but we should rather talk of “learning”.

This is a well-known dichotomy in pedagogy, indicated with these words (“acquisition” and “learning”) by Stephen Krashen (Krashen, 1985), but also known as “explicit” and “implicit language knowledge²⁵” (Giunchi, 1990), and sometimes “competency of use” and “on the use” of the language²⁶ (Balboni, 2002:115).

Language teaching, especially in the frame of the communicative approach, aims to help the learner build an implicit knowledge of the language, but at the same time “we should not forget that an explicit knowledge [of the language] acts like a formal controller, a “monitor”, and supports the processes of analysis and internalization of the new input” (Balboni, 2002:116).

In fact, researches have proved that explicit focalisation on grammatical elements can help learners spot those regularities in the input they receive, therefore maximising their receptivity to it and enhancing their learning (Van Patten, 1996; Benati, 2001; Balboni, 2002).

Since they are past the possibility of “acquiring” language, providing teenage and adult learners with the ability and metalinguistic competences to enhance their learning seems like a sensible and viable option to help them improve their linguistic production.

²⁵ Italian “conoscenza linguistica implicita” and “esplicita”.

²⁶ Italian “competenza d’uso” and “sull’uso della lingua”.

3.3 Applications of the storification procedure

The proposed procedure was initially conceived to support the creation of learning materials for adult, independent learners, but it was realised it could also be applied to guide a learning activity in the classroom. Both options were expected to present advantages for learners (as explained in Table 1) and they were both tested.

	PASSIVE LEARNER	ACTIVE LEARNER
Input at Mental Level		GRAMMAR STORY CREATION: Use the Storification procedure to create stories embedding grammar rules, to support rule understanding and memorization
Multisensorial input	USE OF VIDEO STORY: Watching the video stories created by others in order to get help to understand and memorize abstract content in a format that is easier to understand and remember.	ACTIVE VIDEO PRODUCTION: Use the Storification procedure to create stories embedding grammar rules, to support rule understanding and memorization AND production of that story into a video to add the advantages of multisensorial input.
	Tested in EXPERIMENT A	Tested in EXPERIMENT B

Table 1 - Expected impact of the proposed procedure on grammar rules' understanding and memorization

Chapter 4 describes Experiment A, an experimentation of video grammar stories produced based on the proposed procedure, carried out to check if they could actually support grammar rules' memorization, as hypothesized in Chapter 1.

Chapter 5 and Chapter 6 report on Experiment B, a group of experimentations carried out to check the validity of the procedure in the classroom, namely in upper and lower secondary school.

In this second case, the procedure is to be used by the students to create grammar stories under the guidance of their language teacher, who explains the procedure and selects grammar rules to be embodied in the stories based on the students' learning needs.

The teacher might decide to make the activity less demanding from the point of view of time and technological skills, and avoid the video production of the stories. The activity of grammar story creation appears sufficient to support rules' understanding and memorization. However, the creation

of a multisensorial input is suggested to reinforce the input and make it more effective (for all the reasons we have explained).

3.4 Research Methodology

The method chosen for the experimentations is a mixed method; it includes Triangulation Design and Embedded Design. The advantage of converging different methods has been discussed extensively in the literature (e.g., Jick, 1979; Brewer, Hunter, 1989; Greene, Caracelli, Graham, 1989; Morse, 1991).

The “Triangulation Design” (Creswell, Plano Clark, 2007) is the most common and well-known approach to mixing methods (Creswell, Plano Clark, Gutmann, Hanson, 2003). It consists in obtaining both qualitative and quantitative data, and then comparing them in the analysis.

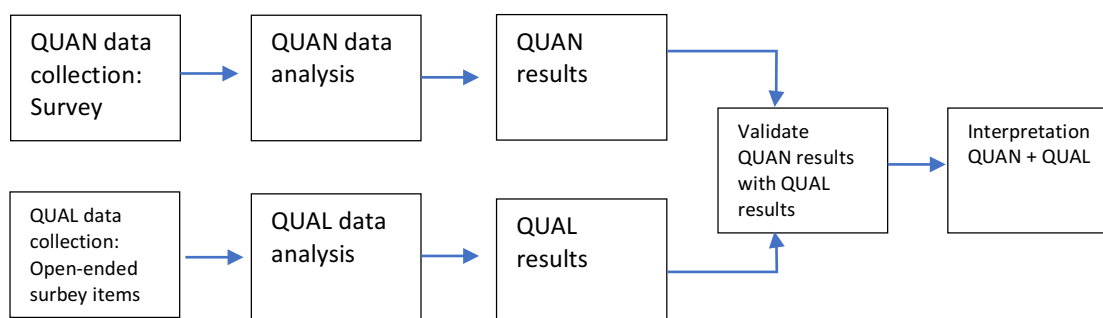


Fig.6: Triangulation Design: Validating Quantitative Data Model (Creswell, Plano Clark, 2007:63)

Its purpose is “to obtain different but complementary data on the same topic” (Morse, 1991:122) to best understand the research problem. It joins the strengths of different methods without overlapping their weaknesses (Patton, 1990).

In our case, a qualitative research helps to see learners as unique human beings, whose emotions need to be taken into account, with different feelings, educational needs and learning styles. However, we also need quantitative data to abstract from individual cases and obtain a wider picture.

Triangulation is contemplated both in Experiment A and Experiment B. The questionnaires submitted for both Experiment A and B included both close and open questions.

For Experiment A the data obtained with the questionnaires were expanded: a selected group of users were also interviewed with semi-structured questions in order to profile them and to complement and deepen their questionnaire's answers; moreover, they were also asked to do a grammar test before

watching the grammar stories and then again just before filling the follow up questionnaire (quantitative data). In this case we talk of “embedded design”: “the Embedded Design is a mixed method design in which one data set provides a supportive, secondary role in a study based primarily on the other data type” (Creswell, Clark, 2007:67).

Evaluating learners’ preparation with a grammar test was taken into consideration also for the students involved in Experiment B. However, it was decided to not do so: we wanted to give students the freedom to choose the information they wanted to work on, hence it would have not been possible to predict the material that should be included in the grammar test to be submitted before the workshop. Moreover, each group of students worked on a different individual grammar rule, so that only one single grammar rule for each student could have been tested after the workshop; it seemed that an examination of this type would not have given reliable data because of its artificial nature. Teachers’ judgement was therefore the only possible reference point to evaluate the experience from the point of view of learning, and in fact teachers were interviewed after the end of the workshop. When data regarding the students’ linguistic proficiency emerged, they were evaluated in combination with the other data collected (we will talk about this in detail in Chapter 5 and 6).

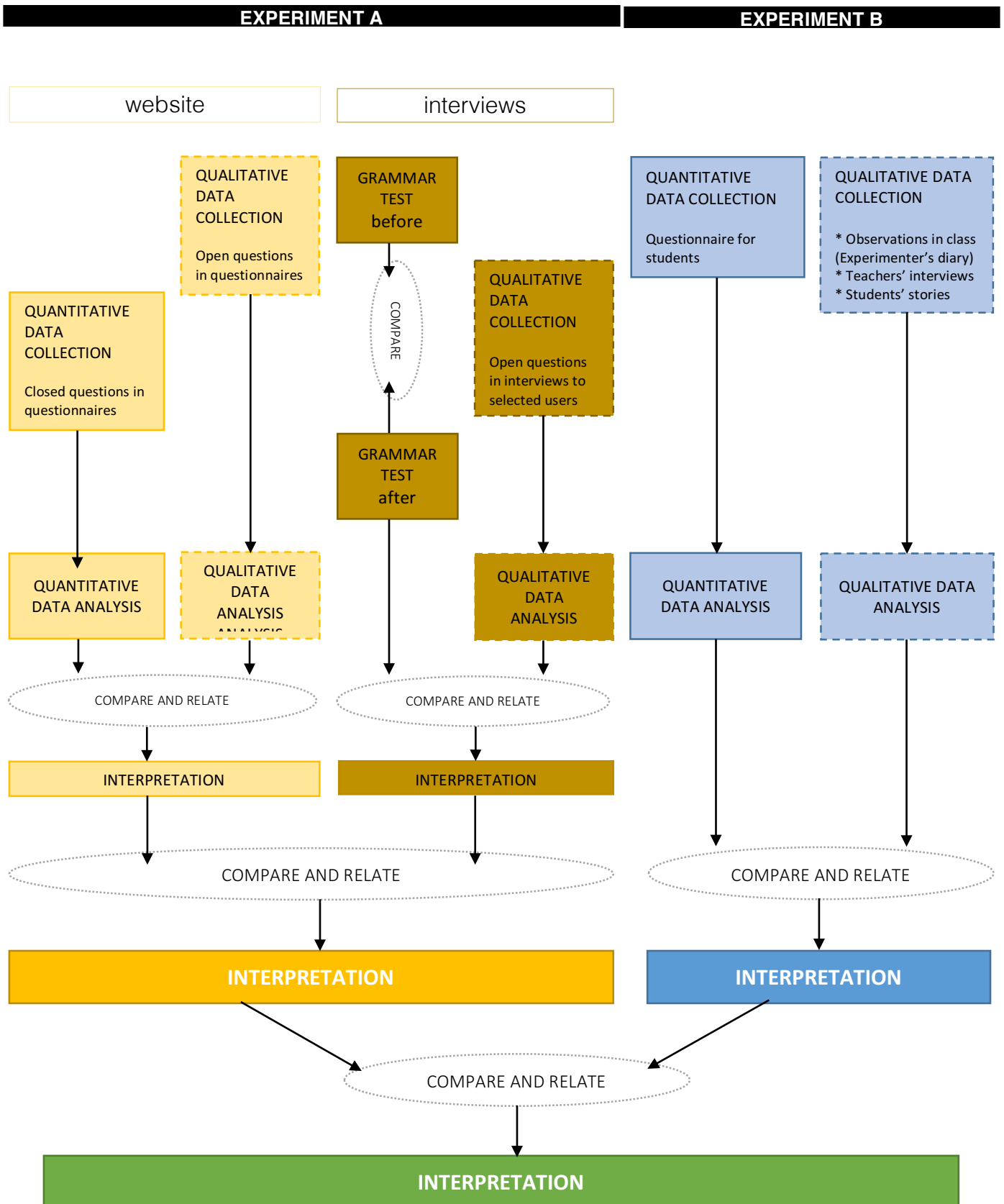


Fig.7– A scheme of the testing for the present work

Chapter 4.

EXPERIMENT A: Grammar Stories WEBSITE

This chapter is dedicated to Experiment A, which tested the passive use of the Storification technique as fruition of the Grammar Stories. Its goals are explained in 4.1, while a detailed description of the materials used to conduct it is provided in 4.2. Section 4.3 is devoted to exhibiting and analysing the data collected. Some final reflections are shared in 4.4.

4.1 Goals

This experiment aimed to explore and evaluate the effects on learning of the Grammar Stories in video format.

In order to carry out the experimentation, the videos were embedded in a dedicated website, designed to be a learning tool. For this reason, it will be evaluated as well, in order to check if the stories were presented in an effective way.

The experimental subjects were Italian adults who received some English formal education; they were not complete beginners, neither experts fluent in the language.

Experiment A aimed to answer the following questions:

- What are the strengths and weaknesses of the Grammar Stories?
- Are they effective in facilitating the understanding of the targeted grammar rules?
- Are they effective in facilitating the memorization and retrieval of the targeted grammar rules?
- Is the presentation format effective? How can it be improved?

4.2 Description of the experiment

Before the experiment, six stories (named “Grammar Stories”) were developed using the storification procedure (2.3). They constituted the content to be tested in this experiment, and are described in Section 4.2.1.

To take part in the experiment, the users were requested to enter a website created ad-hoc. This is described in Section 4.2.2.

There they were free to choose the stories they wanted to watch. For each story, they were requested to fill a questionnaire to check if they understood the meaning of the story and appreciated it (story questionnaire). At the end of the use session, before leaving the website, they were asked to answer a general questionnaire to evaluate the overall experience. Then, after three weeks, they received via email a follow-up questionnaire, to evaluate again the experience and its possible influence on their English. All three questionnaires are described in 4.2.3.

4.2.1 Grammar Stories

Each story was devoted to the presentation of an English grammar rule that had proved to be difficult for Italians.

All the stories were videos, but of two different types: they could be short movies (only filmed material), or what we are going to call *video-stories* (filmed material, combined with still images and/or text). Animated drawings were used instead of filmed material in one video-story.

In the following descriptions, for each story we will specify the format (short movie or video-story), target rule/mistake, and provide a summary of the story, with some notes on its storification process; lastly, the link to the video on YouTube is provided.

Title	To Be Forever Alone
Format	Short movie
Target rule	The Present Perfect is formed by the Present Tense of the auxiliary “to have” followed by the Past Participle. Example: “he has gone”.
Target mistake	The Italian tense corresponding to the English Present Perfect is the <i>Passato Prossimo</i> . <i>Passato Prossimo</i> can use both auxiliaries “ <i>essere</i> ” (“to be”) and “ <i>avere</i> ” (“to have”), depending on the verb it combines with. Italians tend to use in English the same auxiliary they would use in Italian, saying, e.g., “he is gone” instead of “he has gone”.
Story	To_Have and To_Be are two guys sitting at a cafe. Two girls, the Past_Participles, go sit to a table not far from theirs. The guys notice their entrance, especially To_Have.

	<p>One of the girls starts looking at To_Have in a flirty way, while the other is busy on her phone. To_Have tries to convince To_Be to go talk to them, and after some arguing they go sit at the girls' table. To_Have and the flirty Past_Participant start an intense conversation, while To_Be tries to get the attention of the other Past_Participant, without success.</p> <p>After a while, To_Have and one Past_Participant are sharing a romantic moment, while To_Be is left alone by the other Past Participant.</p>
Link	https://youtu.be/CoFn5j08vgU

Title	Speed Dating
Format	Short movie
Target rule	At the Present Tense, the verb has the same form with the exception of the third person singular (he, she, it) which requires the addition of the ending -s or -es (depending on the verb).
Target mistake	Italians tend to forget to add the ending -s/-es.
Story	<p>Verb+s is a guy taking part in a speed dating night. He sits at his table and meets several people.</p> <p>First, he meets various Pronouns who do not seem to have much in common with him. Then She arrives, and they converse amiably.</p> <p>When the time is up and She leaves, Verb+s follows her and meets her friends He and It. In the end, Verb+s happily becomes friend with these three pronouns only.</p>
Link	https://youtu.be/_PK86pWaEJY

Title	Present Sisters
Format	Video story (film + images + text)
Target rule	The Present Simple is used to talk about routine actions and actions regularly performed. The Present Continuous is used to talk about actions while they are happening.

Target mistake	In Italian, progressive verbs are less common than in English, therefore Italians tend to use the Present Simple even when they are supposed to use the Present Continuous. For example, talking with someone who is reading a book, they would ask him “What do you read?” instead of “What are you reading?”
Story	<p>Present_Simple and Present_Continuous are twin sisters. Simple lives a calm life, defined by a routine. Continuous is more adventurous and is always trying something new.</p> <p>One day, Simple decides she wants to be more like her sister and tries unusual activities, but it turns into a disaster. She understands she has to stay true to herself and leave extemporary activities to her sister.</p>
Link	https://youtu.be/z9wZI_H38ts

Title	Gerunds and Prepositions’ Ball
Format	Video story (animated drawings + text)
Target rule	If a verb follows a preposition, it must be in the gerund form.
Target mistake	When a verb follows a preposition, Italians tend to use the infinitive form as they would do in Italian. They would say, e.g., “without to speak” or “without speak” instead of the correct “without speaking”.
Story	<p>The story starts in a school where Gerunds and Prepositions are students. Prepositions are cute, small, orange circles. Gerunds are tall, green rectangles.</p> <p>It is the annual ball, and the dance floor is filled with couples, each featuring a Gerund and a Preposition</p> <p>An Infinitive, who has infiltrated in the ball, approaches a preposition remained alone, but a Gerund comes back and confronts the Infinitive, forcing him to leave.</p>
Link	https://youtu.be/49oxvF09MzA

Title	Dancing
Format	Video story (film + text)
Target rule	Present Perfect Continuous is used to talk about actions started in the past and not yet concluded. It is usually accompanied by prepositions For and Since, expressing for how much time the action has been going on and since when.
Target mistake	Italians tend to use the Present Simple instead of the Present Perfect Continuous. For example, to translate “ <i>Vivo lì da dieci anni</i> ” they would say “I live there since ten years” instead of the correct form “I have been living there for ten years”.
Story	<p>Present_Perfect_Continuous is a dancer, with two backup dancers, For and Since, who accompany him every time he performs.</p> <p>One day, while he is dancing, he leaves his spot to go say hi to a friend. Present_Simple, his rival, takes advantage of that moment to start dancing with his crew.</p> <p>In the end, Present_Perfect_Continuous comes back and gets rid of Present_Simple, swirling her out of the dancefloor.</p>
Link	https://youtu.be/HbgPdVAitzI

Title	All By Myself
Format	Short movie
Target rule	The verbs “wake up”, “wash”, “dress” are used in their active form and without a direct object to express a reflexive use.
Target mistake	Italians tend to add a reflexive pronoun (e.g., “myself”) as these verbs in Italian can be used in reflexive form. For example, they might say “she wakes herself up” instead of the correct “she wakes up”.
Story	Myself, Wake_up, Wash, and Dress are four people who share an apartment.

	Myself is always willing to help her flatmates to perform their actions, but they do not want her to interfere with their lives and decide to expel her from the apartment.
Link	https://youtu.be/AbBbRoEvKYs

4.2.2 The website

This was the structure of the website²⁷ (Fig.8):

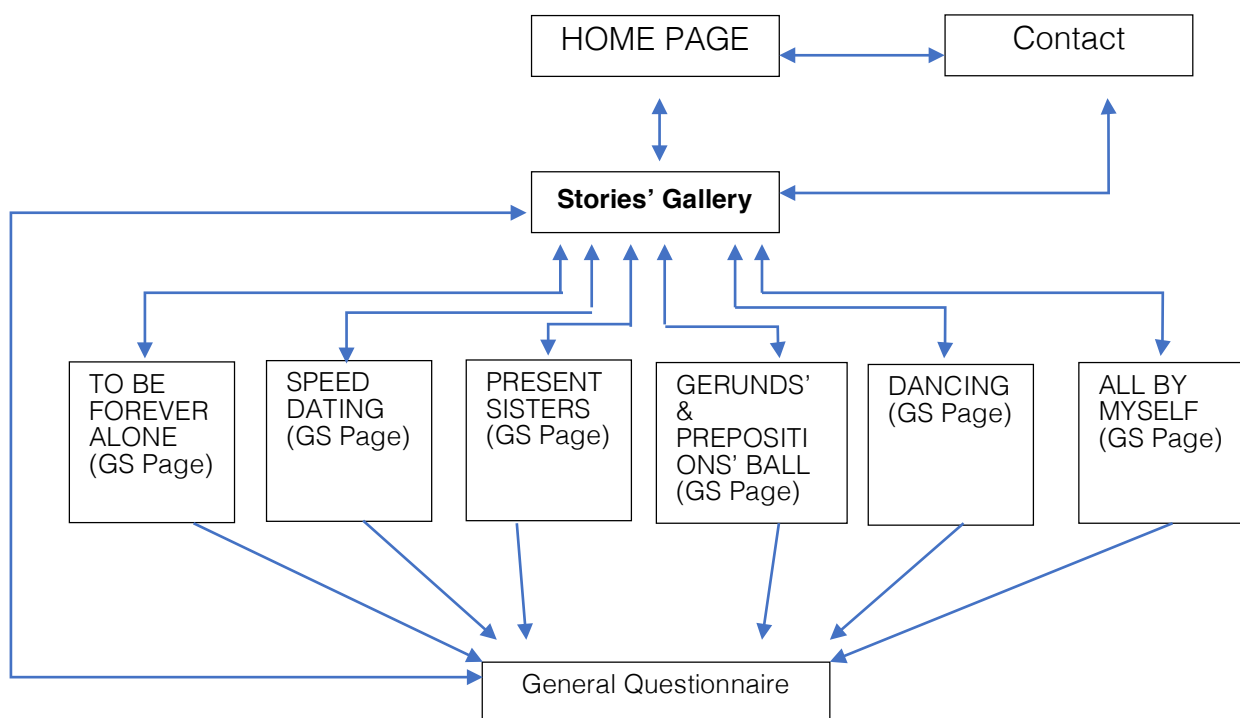


Fig.8 – The wireframe for the experimental website

The participants would access the Home Page, which contained a short introduction to the project in both textual format and in video (1':45", features the experimenter), explaining the requirements to take part in the experiment (purposeful sampling²⁸): they must speak Italian as first language, have studied English and use it every once in a while, yet being aware to make several mistakes. It was decided to make a video and not simply to write the instructions in order to create an emotional connection between the user and the experimenter, as a source of motivation to encourage testers to

²⁷ Link to the website: <http://serenazampolli.com/grammarstories>

²⁸ "Purposeful sampling means that researchers intentionally select participants who have experience with the central phenomenon or the key concept being explored" (Creswell, Plano Clark, 2007:112).

complete all the steps. A transcription of what was said in the video was provided for users who prefer reading.

At the bottom of the page, a button reading “Ok, I understood the instructions and I am ready to go”, recorded user's acceptance to participate in the experimentation and redirected to the Stories' Gallery (*Galleria Storie*) page, which collected the Grammar Stories.

Each story was shown with its title, a still frame from the video, a short description of the related rule and mistake. When the user would click on the title of a story, s/he was redirected to its individual page.

The context was that of self-direct, non-formal autonomous learning, therefore the user could choose to watch how many stories s/he wanted, in the order s/he wanted.

Each Grammar Story page provided users with (from top to bottom):

- Textual description of the grammar rule targeted,
- Textual description of the common mistake associated with it,
- List of the characters, each clickable to see a textual description of the corresponding linguistic item,
- Grammar Story (video),
- Story Questionnaire for that specific story.

The textual descriptions complemented the story: the learner was told which grammar rule and/or mistake the story was about, as a help to decode it. Moreover, learners might not have knowledge of that specific grammar rule and/or mistake, and this would have made it difficult to understand the story meaning.

After watching the story and filling in the questionnaire, the user could return to the Story Gallery and watch other videos.

When the user did not desire to watch any other story, s/he was asked to complete the General Questionnaire.

4.2.3 Questionnaires

The questionnaires designed for this experimentation were three: story questionnaire, general questionnaire, follow-up questionnaire.

➤ Story Questionnaire ²⁹

In each individual Grammar Story page a Story Questionnaire was proposed. This was the same for all the stories apart from Question 3, which asked the respondents to choose the correct description of the grammar rule among four options, featuring the correct rule and some incorrect variants.

It consisted of 21 questions. Questions 1 to 4 investigated story comprehension: Question 1 (open) asked the user to write a summary of the story s/he had just watched; Question 2 (open) asked what was the most impactful and memorable feature in the story; for Question 3, it was decided to opt for a multiple choice question because it allowed us not only to verify what the user had understood but also to support comprehension (Balboni, 2002:249,250) and the options given were specific for that story; Question 4 asked if answering Question 3 was easy or hard, and why.

Question 5 investigated the reasons for choosing the story and provided three options with the possibility of adding a new one; Question 6 asked the user to self-evaluate how often s/he gets the rule wrong when speaking and writing in English.

Questions 7 and 8 evaluated the perceived efficacy of the story format: Question 7 asked the user to express his/her opinion on this aspect; Question 8 asked the respondent if s/he would be able to explain the grammar rule to someone else. Asking the user to imagine him/herself performing this action is likely to lead to a more accurate result than simply asking “Do you feel you understand the rule better now?” (Rigo, 2005:104).

Question 9 investigated the emotions of the users while watching the story, and Question 10 collected his/her opinion on the stimulus in terms of novelty, pleasantness, pertinence (three of the elements individuated in the stimulus appraisal theory, Schumann, et al., 2004).

Questions from 11 to 15 investigated the user’s opinion on the descriptions of the characters. Questions 16 and 17 investigated the characterization of the characters in relation to the linguistic items they represented. Questions 18 and 19 investigated the user’s opinion about the format of the story. Finally, Question 20, provided a space for free comments.

➤ General Questionnaire ³⁰

This consisted of 14 questions. Questions 1 to 4 collected information on the user and his/her experience with learning and ability at visualizing abstract concepts.

²⁹ See Appendix 1.1

³⁰ See Appendix 1.2

The next section focused on the Grammar Stories. Question 5 asked the user which Grammar Stories s/he watched, and Question 6 if the respondent had ever experienced a grammar rule delivered in this way; in case s/he did it asked to provide information about it. Questions from 7 to 11 investigated the opinion of the user on the Grammar Stories as a whole and on their possible influence on her/his English learning.

Question 12 investigated which strategies the user usually applies when faced with doubts on the use of English constructions, and Question 13 asked him/her if s/he would consider using the Grammar Stories in the future and how. Finally, Question 14 provided a space for free comments and suggestions.

➤ Follow-up Questionnaire ³¹

This included 8 questions. Question 1 asked to write what the user remembered about them. This question focused on the stories, while Question 2 asked about the corresponding grammar rules, therefore forcing him/her to rebuild the original meaning and target information. Question 3 asked the user to write what s/he thought in order to answer Question 2. This question was particularly important because it allowed to peek into the thinking process of the users and confirm or disconfirm the idea that we think visually and in story form³².

Question 4 asked the user if s/he had thought of the Grammar Stories in the time between the first test and the follow-up. This was particularly meaningful in case of users who had the opportunity to talk or write in English, because it aimed at investigating if the mind had triggered the information delivered in the Grammar Stories when needed.

Question 5 asked the user to self-evaluate his/her production in relation to the grammar rules whose stories s/he had watched.

Question 6 investigated the emotions of the users towards the use of English, in order to see if there had been changes compared with the initial general questionnaire.

Question 7 asked an opinion on the perceived effectiveness of the Grammar Stories on his/her understanding and memory of the grammar rules, and Question 8 provided space to add comments on this.

³¹ See Appendix 1.3

³² Asking tested users to “think aloud” or describe their mental processes is a method used for user testing in the field of UX/UI design, as explained by Krug (2009).

4.3 Data collected and analysis

The experiment lasted five months and involved a total of 46 people. Section 4.3.1 describes these participants in detail. Section 4.3.2 is dedicated to the embedded experimentation which involved a small group of participants in some extra testing. In section 4.3.3 we provide an overall assessment of the Grammar Stories and identify their strengths and weaknesses. After this overview, the analysis goes deeper and focuses on the effects of the Grammar Stories on participants' understanding (4.3.4) and remembering (4.3.5) of the grammar rules. Then, a section is dedicated to the analysis of the efficacy of the format used to present the Grammar Stories to the learners (website, video, ...) (4.3.6).

4.3.1 Participants

The experiment involved 46 people in total. All of them completed the first part of the experimentation (Story Questionnaire/s and General Questionnaire), and 32 of them completed the whole process by filling also the Follow-up Questionnaire. Among these, 10 people were also interviewed and completed a grammar test (4.3.2).

The majority of them were recruited directly from the experimenter by disseminating the request through social channels, while a few were involved by other participants.

Each individual Story Questionnaire received a different number of answers:

- the one for "To be forever alone" was filled by 34 people;
- the one for "Speed Dating" by 25;
- the one for "Present sisters" by 28;
- the one for "Prepositions and Gerunds Ball" by 27;
- the one for "Dancing" by 27
- the one for "All by myself" by 29.

The majority of the participants were in their mid-late twenties: 17 people were in the 24-30 age group, 13 people in the 31-35 age group, 7 in the 36-40 age group, 4 in the 41-50 age group, 5 in the 51-60 age group.

In Italy, English became an obligatory school subject in the Nineties. The study of the language usually started in third grade, but the situation could differ from one school to the other. Before that

students could decide to study English or another foreign language. Starting in 2003, the study of English has become mandatory from the first grade for everyone.

This means that the participants in their twenties and thirties have likely had at least some experience with English at school, while those in their forties and fifties might have studied it in school or independently. At the moment of the experimentation, only 3 participants out of 46 were taking classes or following an English course.

Most respondents reported that their experience as students of English was positive³³ (55%, against a 16% for whom it had been negative³⁴, and 29% for whom it was neither good or bad³⁵).

The main reasons for a negative experience were: discontinuity in the teaching (a different teacher every year, teachers being substituted during the school year), teachers that were not adequately prepared or motivated, antiquated teaching methods (mechanical practice in the style of the audio-oral method, focus on grammar only with disregard for the communicative applications of the language).

It is interesting to note that their experience as students seemed to be mirrored also in how they felt towards the language: English was considered problematic for 28% of the participants, 30% said they had no feelings towards it, and 41% said they felt at ease with it. The communicative function they found the hardest was speaking (54% said they found it hard, against a 26% who said they felt comfortable with it, and the remaining who felt neuter), followed by listening (43% found it hard, 30% felt at ease, 26% neuter) that ended up being considered harder than writing (hard for 33%, easy for another 33%, and neuter for the remaining 34%), while reading seemed not to be a big problem (59% of the respondents felt at ease with it, and only 17% found it hard). This implies that the situation they would be most uncomfortable with is probably in person communication, which is one of the obstacles that this project wants to tackle.

4.3.2 Embedded Experimentation: Interviews & Grammar Tests

Ten of the participants described in 4.3.1 volunteered to be involved in a supplementary research. They were in their late 20s, early 30s, studied English in school, were used to listening to music, watching movies, writing and occasionally chatting in English, but felt insecure and were aware of making mistakes.

³³ In detail: 6,5% (3 people) said it was "great" (*ottima*), 32,6% (15 people) said it was "good" (*buona*), 15,2% (7 people) "very good" (*molto buona*).

³⁴ In detail: 8,7% (4 people) said it was "negative" (*negativa*), 4,3% (2 people) said it was "very negative" (*molto negativa*), 1% (1 person) "terrible" (*pessima*).

³⁵ In detail: 17,4% (8 people) said it was "decent" (*discreta*), 10,9% (5 people) said it was "neuter" (*neutra*).

Before accessing the website for the first time, they were interviewed and asked to fill a grammar test. Then, they were observed as they accessed the website like any the other user. After filling the questionnaire, the experimenter asked them some more questions to expand the user's answers.

After three weeks, they were asked to fill again the grammar test. After that, they were asked to fill the follow-up questionnaire at the presence the experimenter, who encouraged them to give richer answers by asking some questions on the spot.

The Grammar Test³⁶ was formed by 23 English sentences. There were four³⁷ sentences for each of the six rule-mistake pairs targeted by the Grammar Stories: in each set (with the exception of "Gerunds and Prepositions' Ball"³⁸), two sentences were correct, and two contained the mistake. For each sentence the user had to say if the sentence was correct or not, and to try and write the correct sentence or specify the error. For some sentences which might sound ambiguous if taken out of context, an image was provided to clarify the context of use.

It must also be said that the results of the grammar tests confirm the mistakes individuated by Swan and Smith (2001): when they took it for the first time, half of the respondents involved in the experimentation committed from two to five of the mistakes targeted by the six Grammar Stories, while the other half committed all six; none of them got all the answers right.

4.3.3 Overall judgement

The learning material presented in the website was judged positively by all the respondents, both when they were asked to take into account the Grammar Stories together with the contextual information provided (Fig.9) and when they were asked to judge the Grammar Stories alone (Fig.10). Many respondents who answered "Positively" commented that they did not choose "Very positively" only because there is room for improvement, especially as concerns the quality of the video production.

³⁶ See Appendix 1.4.

³⁷ For the grammar rule associated with "Present Sisters" the test presented three correct sentences and one wrong. See Appendix 1.4 for details.

³⁸ For "Prepositions and Gerunds' Ball" three sentences (two correct, one wrong) were presented instead of four. See Appendix 1.4 for details.

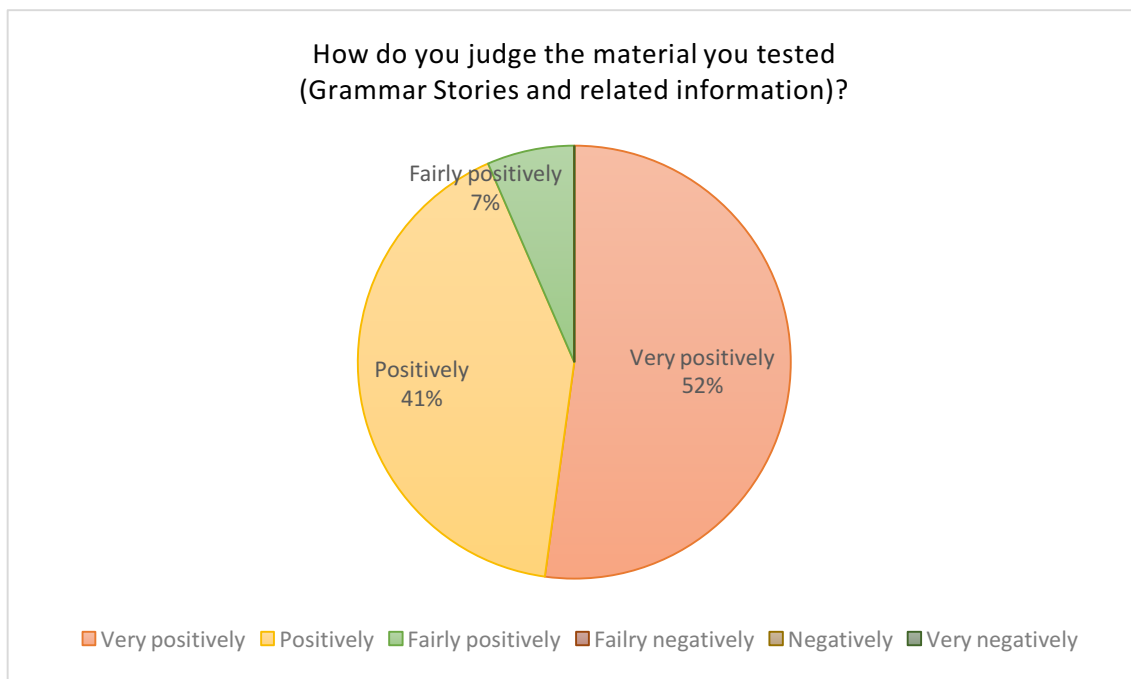


Fig.9 – Representation of the answers to Question 9 in the general questionnaire

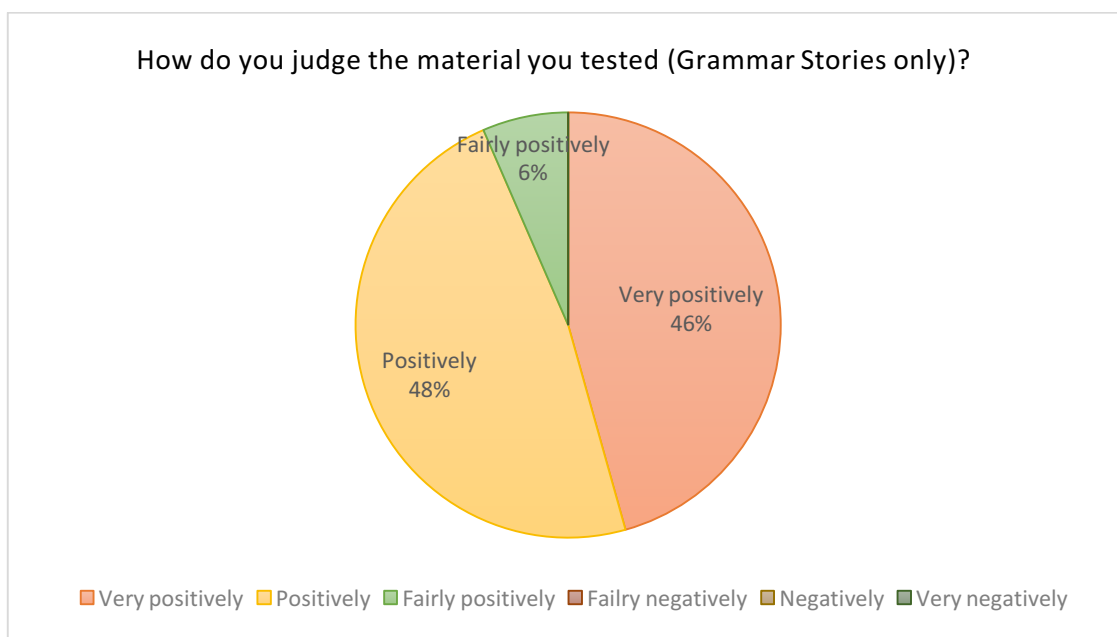


Fig.10 – Representation of the answers to Question 10 in the general questionnaire

This result is supported also by the data collected with the six individual story questionnaires in relation to understanding and remembering: the majority of the respondents agreed with the statement that, after receiving the grammar rule in story-format, they felt they understood it better (78%) and remembered it better (86%); “Speed dating” is the story with the lowest score since it is a basic rule and respondents felt they already had it well in mind.

Is it really so? We will discuss this in detail in Section 4.3.4 and Section 4.3.5, but a first insight comes from the ten interviewees. After answering yes to the question in each story's questionnaire that asked if they would be able to repeat the grammar rule after watching it in story-form, the interviewees were asked to actually do it for the interviewer. They were all able to do it, with variable confidence, showing that they understood the input.

Moreover, the majority of them said they were thinking of the video while describing the rule (see Section 4.3.4), showing also that they were able to re-code the information received from story in expository form. The main obstacle was remembering the name of the linguistic items (for example, Present Perfect Continuous, Past Participle, ...); this might be in part due to a lack of knowledge in the field of linguistics.

According to the data collected with the questionnaires and the interviews, it was possible to identify five *points of strengths*:

1. Turning abstract into concrete

Shaping the grammar rules into story-form makes them something tangible, and this has been judged very helpful by the respondents. In the general questionnaire, their answers highlighted that thanks to this “the rule is no longer a formula you repeat meaninglessly by heart”³⁹, but “can be associated with a specific memory”; these stories make the information “impactful and visual, and when you need to retrieve it you do so by retrieving the visual memory and the experience, not the words of the text; this helps both the learning and memory process.”

The video format, in combination with the story, implies two strengths of this process:

1.a. Being visual

They are *visual* stories, and this allows learners to rely on their visual memory, which is the strongest for the majority of people (it was explicitly mentioned by 20 respondents out of 46). Moreover, the linguistic items are represented in the story by characters that carry elements of visual connection with them and whose behaviour is consistent with them, therefore offering extra grasp for the visual memory. In fact, 90,5% of the respondents judged the characterization of the characters useful: “Present sisters” was the best in this regard, as 100% of the respondents judged it useful, while that of the remaining stories had a small minority judging it neuter; both for “Prepositions and Gerunds

³⁹ From this point on, the quotations mark signals a quote from the comments collected in the experimentation.

ball” and “All by myself” one respondent even said it was confusing. Even if the characterization received the praise of the respondents, some of them suggested to enhance it, for example by making more use of colours to differentiate the characters or accessorizing them more.

1.b. Being shot in live action

The Grammar Stories are not only visual but shot in live action. This proved to be an asset: respondents showed great appreciation for the decision of having human characters, acting out human-life dynamics. “Rules take on a face and a body,” and “materializing an abstract concept like a verbal tense, giving it a face and investing it with the power of acting is the best way to make it memorable”. One respondent said that “associating a rule - a verb, a tense, etc. - with a human behaviour, gesture, personality, makes it more understandable, because it is something common, familiar, that everyone can understand even without using words”. Sterile linguistic items are not only made real but given “human warmth”, and this makes them and their stories engaging, meaningful, and therefore impactful and memorable.

2. Engagement

The Grammar Stories have been judged amusing and emotionally engaging.

2.a. Emotionally engaging

As we have just said, the presence of human characters and familiar situations allows the learners to empathise with the characters in the stories and feel involved. In commenting the stories, respondents showed to feel sorry when To_Be was left alone at the bar, as they also were when Myself was kicked out of the apartment (others were glad because they sympathised more with her flatmates and found her very annoying); one also criticised Verb+s for thinking that love can be found through speed dating.

2.b. Amusing

The majority of the respondents felt positive emotions while watching the videos: 66% picked the word “amused” to express how they felt, 18% “happy”, 5% “curious” or “interested”, and only a minority said they felt “neuter” (7%) or selected a negative emotion, like “distracted”, “bored”, “impatient” (4%). The story that was less appreciated was the one using animation, “Prepositions and Gerunds’ Ball”, which was judged the less impactful precisely for its lack of live actors.

This data is confirmed by the fact that 95% of all answers agreed with the statement that the Grammar Stories are a pleasant input. This is very important to make such stories a memorable input. Like one of the respondents said, “it might be true [using the Grammar Stories] requires more time, but it also requires less effort and it favours stronger memories.”

Moreover, several of the comments highlighted a strong appreciation for the humour that permeates all the stories: by making them funny, it makes them memorable.

3. Clarity

The Grammar Stories were praised for being a “simpler” and “immediate” form of communication, “easier to understand than the traditional explanation in grammar books”. This thanks to the story-format and also to the contextual information given, which allows learners to reach a full understanding of the story in the video.

The Grammar Stories are very focused since they tackle common mistakes only (and just one mistake in each story), and this was greatly appreciated: respondents praised the ability to raise their awareness and enhance their attention for rules that are proved to be the trickiest for them. Finally, they liked that the stories do so contrastively by having a grammar rule/hero winning over a common mistake/antagonist; this makes the message very clear because, as a respondent said, “it is like the story is there to tell you: this is what you should do, this is what you must avoid.”

4. Adaptability

It was noted by the respondents that this material can help both expert learners who want to revise or reinforce specific knowledge or maybe need to fill some gaps, and beginners who are still working towards a full competence, and this independently of age. This is confirmed by the fact that 82% of all answers judged the material relevant for their needs, even though the differences in age, background and learning experience suggests that they likely do not have all the same learning needs.

5. Originality

The Grammar Stories are novel. This is confirmed by the fact that the delivery of the linguistic information in story-form was judged “new” by 89% of all answers, and that 85% of them claimed they never saw something like them before. The number would probably raise if we would exclude those who misinterpreted the question and mentioned the use of stories in general to contextualise information. The few who said they did see something like the Grammar Stories (8%) mentioned examples not related to English (learning Japanese ideograms turning them into images and then

combining them into stories, Italian nursery rhymes to remember grammar rules taught in primary school) or learning material and experiences that are attributable to a moment of inspiration related to a specific subject but not systematic.

Being something unusual, the Grammar Stories are a learning material that thrills and engages the learner (“The videos were funny and new. A boring mind is less receptive. I think that if they were in a more canonical, more traditionally scholastic format they would probably not be as effective”).

The data collected made it possible to identify also two main *weaknesses*:

1. In several occasions, respondents voiced doubts about the use of only the Grammar Stories to teach languages. This was not the initial intention, however, and the Grammar Stories have always been intended to be used as an aid to learning and improvement, not as an exclusive teaching/learning method. This fact would probably need to be better communicated to the users if this project will further be developed.
2. Further contextual material is wished for, especially something that would allow learners to apply right away the knowledge they gain with the Grammar Stories, like interactive exercises to complete after watching a video.

4.3.4 The effect of the GS on learners’ understanding of the grammar rules

There is ample agreement on story-format facilitating the understanding of English grammar rules: for each story they watched, the participants were asked if they thought that delivering that grammar rule in story-form had facilitated understanding, and an average 90% of all answers said yes; moreover, when asked if they thought it made it easier to understand compared to the canonical written explanation, 87% said it did.

They were asked to self-evaluate their understanding of the grammar rules by imagining to explaining it to someone else (Table 2).

After experiencing this grammar rule delivered in story-form, would you be able to explain it to someone else?	To be forever alone	Speed Dating	Present Sisters	P&G Ball	Dancing	All by myself
Yes, and I would have been able to do it even before	3%	75%	31%	7%	0	7%

Yes, and I think I would have been able to do it before but with less confidence	46%	17%	38%	44,5%	41%	48%
Yes, and before I would have not been able to do it	36%	8%	27%	44,5%	48%	45%
I do not know if I could do it before and/or now	12%	0	4%	4%	11%	0
No, I would have not been able to do it before and I would not be able now	3%	0	0	0	0	0

Table 2 – The data collected in Question 8 of each story questionnaire.

In green the results that are positive and encouraging, in yellow the ones that are critical.

“Speed dating” delivered a rule that was already well-known, as did “Present sisters”, and people felt confident about them even before watching the Grammar Stories. For the others, the two highest values are associated with an increase or a gain of confidence: the majority of those who did not know the grammar rules or were unsure about them said that watching the Grammar Stories had made them more confident if they were to explain those rules to someone else.

The feeling of an increased understanding lasted in time, since 81% of the respondents to the follow-up questionnaire said they noted an improvement in their understanding of the English grammar rules whose stories they watched. This is, however, a self-assessment, and should be verified.

Nevertheless, the data collected give us some interesting insights. After watching each video, the respondents were asked to write a summary of the story: only a small minority re-wrote the grammar rule (in total 5 answers of this kind), while the majority understood the assignment and performed it with no problem, even though some wrote a brief summary and some a detailed one. These summaries show a clear understanding of all the stories. This might seem obvious, but it is not, considering these stories involve a level of metaphorical meaning. This is the reason why making sure of their understandability was really important in this experimentation.

It is also interesting to note that, while summarising, all the ten interviewees said they were visualising the video in their mind, re-living what they had just watched like in a mental “movie theatre”. This confirms the statement made in 1.5 that we tend to visualise our memories when we retrieve them, and further corroborates the decision of opting for a video format.

Further support comes from the fact that for five stories out of six the elements that were indicated as the most memorable were elements of the story themselves (the interactions between the characters, their actions or behaviours) which could be fully displayed thanks to the video format. This reinforces

the claim that moving images are more effective than still images (1.8) as far as input processing is concerned.

Seeing which elements of the Grammar Stories were the most impactful is a very interesting part of our research and can be of great help in the design of future stories.

For “To be forever alone” the elements that were noted and remembered the most were the flirting behaviour of To_Have, the blonde Past_Participles, and the sadness of To_Be left alone at the cafe; for “Speed dating” the characterization of the characters, especially the red dress worn by She, and the reactions of Verb+s; for “Present sisters” the contrast between the lives of the two sisters; for “Prepositions and Gerunds Ball” the colours and the facial expressions given to the animated characters (it is interesting to see that, in the only video without actors, the respondents maintained their preference for whichever was human); for “Dancing” the self-confidence of the Present_Perfect_Continuous and his introduction; for “All by myself” the comical (or annoying, depending on points of view), intrusive attitude of Myself.

In these answers it is possible to find again both the preference for a visual input, and the engagement due to feeling empathy with the characters. It indicates that opting for real actors was the right choice for the Grammar Stories.

The respondents were able to understand the stories, but would they be able to re-code them in order to associate them with their grammar rule? Yes.

After watching a video, the respondents proved to be able to identify the correct description of the target grammar rule among a series of options: for four videos out of six (“To be forever alone”, “Speed dating”, “Present sisters”, “Prepositions and Gerunds Ball”) the correct answers reached 100%. For one of them, “Speed dating”, this result is motivated by a previous knowledge of the rule, but for the other three the main reason is claimed to be the story and its clarity.

The rule’s description associated with “Dancing” was correctly identified by the 85,2% of the respondents, the clarity of the video again claimed to be the reason, and the problem here being a formulation of the options that were judged “a little bit difficult” and “confusing”.

The most difficult story was “All by myself” (79% of correct answers). The reason for this was a mistake in the writing of the options, which implied the respondents had read the characters’ descriptions (which is something one could decide to do or not) to know the answer.

More information came from the interviewees, who were asked to describe their mental process in deciding which option to choose. These results mirrored the previous ones: for “To be forever alone”,

“Dancing” and “Prepositions and Gerunds Ball” most respondents (respectively 80%, 75%, 88%) said they thought of the video and the story; for “Speed dating” and “Present Sisters” all respondents said they knew the rule before and that is where their mind went, but the images of the video helped retrieve it (this happened for half of the respondents in the case of “Present Sisters” and for two thirds in the case of “Speed Dating”); “All by myself” was again problematic for all respondents because of the wrong formulation of the options, which forced respondents to think of the characters’ description, and not of the story only.

In conclusion, a story-format with characters played by live actors proved to facilitate the understanding of abstract information. The more the characters are marked out, characterised in order to be linked to their linguistic item, the better. This can be done via their aspect (colour of their clothes, accessories, placing of name on their shirt, ...), behaviours and actions.

Naturalism does not matter, since learners are able to understand the subtle message of the story and code it to obtain the linguistic information.

The contextual information provided must be easy to understand and clear, written with the purpose of complementing the Grammar Story and make the message easy to decode.

4.3.5 The effect of the GS on learners’ memory and application of the grammar rules

The answers to the questionnaire showed more uncertainty towards the effect of Grammar Stories on remembering the rules compared to their effect on understanding them: 69% agreed with the statement that after watching the Grammar Stories they remembered those rules better, 22% were not sure, and 9% said they did not agree. This is in part due to the long-time gap between watching the stories and filling in the follow-up questionnaire: three weeks proved to be too long a pause. It would have been better to send the follow up after one week or ask the respondents to revise the stories in order to reinforce their memory. This miscalculation, though, can provide useful insights: if some memory of the Grammar Stories was kept for such a long time and without reinforcement, it suggests that the input is effective.

Looking at the data, it is possible to get several hints about the effectiveness of the Grammar Stories when it comes to maintaining and retrieving memory of problematic grammar rules.

1. Partial recollection of the grammar rules associated to the stories

Even after three weeks, the respondents were able to recollect information regarding the grammar rules, even if it was difficult for many of them.

When asked to write the grammar rules of which they had watched the story, these were the correct answers (Table 3):

	To be forever alone	Speed Dating	Present Sisters	P&G Ball	Dancing	All by myself
Provided a complete and correct description	24%	100%	69%	57%	28%	48%
Provided an incomplete or only partially correct description	38%		12%	19%	33%	38%
Could not remember the rule	38%		19%	24%	39%	14%

Table 3 – Data collected in response to Question 2 of the follow-up questionnaire.
In green the results that are positive and encouraging, in yellow the ones that are critical.

“Speed dating” was again not a problem being a well-known rule, as “Present sisters”. The rule associated to “Prepositions and Gerunds Ball” was also remembered by the majority of the respondents who watched it, thanks to the simplicity of the information delivered by the video. “All by myself” worked well enough, and the missing information in the incomplete answers was mainly the name of one or two of the three verbs. The rules associated with “Dancing” and “To be forever alone” were the hardest to remember. The comment section tells us that respondents found difficulties in remembering the name of the tenses; associating them with examples could have helped, but examples were not provided in the video. Lacking these, the grammar rule did not settle into their minds: it did not find a place in the pre-existent network of knowledge and was forgotten. This suggests that more support when it comes to linguistic lexicon is needed, especially with difficult topics like verbal tenses.

2. Memory of videos is stronger than that of still images or text

Even if the recovery of the information was partial for the majority of the respondents, it is interesting to note it took place by relying on the story, and that moving images made a greater impression than still images or textual information. In fact, 64% of the respondents thought of the stories and their

scenes in order to write the grammar rule in the follow-up questionnaire (and saw the characters “moving” in their mind), against 25% visualising still images (three of these seven respondents relied on the thumbnails of the videos) and 11% by thinking of the textual rule.

This is confirmed by the fact that, when asked what they remembered of the stories watched, 75% of the respondents answered mentioning elements of the story, while 10% referred to visual static elements, and only 5% to the textual information. A special mention goes to the stories’ humour, evidenced by 2 respondents (10%).

This confirms the utility of the story-format and further supports the choice of the video as medium.

3. Tangible benefits

The use of the Grammar Stories had an impact on the linguistic competence of their users, even if with different outcomes from the ones expected: 28% of the users said they did not think of the Grammar Stories in the three weeks between watching them and filling the follow-up questionnaire, but 72% did. Among them, 22% said their Grammar Stories’ memories resurfaced while they were producing in English and helped them avoid mistakes.

The comment section offers some insight on how it happened. One respondent wrote a comment about “All by myself”: “I was preparing to talk with a person in English, and at a certain point I realised I was using one of three verbs of the story (I don’t remember which one) and I made the connection. I smiled thinking about the story and I remembered the rule”⁴⁰. About the same story another one said: “In the last days I have been texting with an Irish friend and I thought of some frames of All By Myself. I thought of the characters and their shirts. I felt more confident about a rule that has often been not so easy to remember”⁴¹.

The same sense of enhanced confidence was felt by another respondent in relation to the story of “Gerunds’ and Prepositions’ Ball”: “I thought of the video to use the gerund with the correct locutions. The result was that of filling a gap that used to make me nervous”⁴².

Another respondent highlighted how the story “To be forever alone” helped her pay more attention to a mistake she tends to make (“I corrected a sentence I had just written, changing “to be” with “to have”... a mistake I need to be aware of when I write”⁴³), and another one said she thought of the

⁴⁰ “All by myself: Mi stavo immaginando a raccontare una cosa a una persona con cui dovevo parlare in inglese, a un certo punto c’era uno dei tre verbi della storia (non ricordo quale) e ho fatto il collegamento. Ho sorriso a ricordare la storia e mi sono ricordata la regola.”

⁴¹ “Mi è capitato di ricordare alcuni frame del video “(All by) Myself” nei giorni scorsi mentre scambiavo alcuni messaggi con un amico irlandese. Ho ripensato ai personaggi e alle loro maglie. Mi sono sentito più sicuro riguardo a una regola che spesso non è stata per me così semplice da ricordare.”

⁴² “Mi è capitato una volta per il gerundio e ho utilizzato il video per usare un verbo al gerundio con le corrette e relative locuzioni. L’effetto è stato quello di ristabilire una lacuna che mi rendeva nervoso.”

⁴³ “ho corretto la frase da me scritta, cambiando da to be a to have...errore a cui devo stare attenta quando scrivo”

characters of “Dancing” while using the Present Perfect Continuous. Another one thought of “Speed Dating” while writing an email and realised some of its verbs missed the ending.

In addition, 3% said their Grammar Stories’ memories resurfaced while listening, and 16% felt the Grammar Stories improved their English because they enhanced their awareness of common mistakes. Altogether, a total of 36% of the respondents reported tangible benefits deriving from the contact with the Grammar Stories. This is a good starting point.

4. Correcting mistakes

The Grammar Stories can have a positive effect on learners, but can they really make those same learners use problematic grammar rules correctly?

The perception of the respondents was that they do, but there was not a clear-cut majority: 53% of the respondents agreed with the statement that the Grammar Stories have bettered their English production, but 38% chose the option “I do not know” and 9% said they did not agree.

Because these numbers come from a self-assessment, we can observe the results of the grammar test that the interviewees filled before and after watching the stories. When filling the grammar test the second time, one out of ten interviewees corrected all the mistakes she had made the first time; 6 interviewees corrected one or more of their mistakes but reiterated the others; 3 showed no sign of improvement.

In conclusion, the Grammar Stories proved to have some impact on the participants' language correctness, mainly by enhancing their awareness of common mistakes but also by helping them avoid them and form correct sentences, even if to a limited extent. Some improvement in the writing competence also emerged, but it is not as meaningful as expected, probably because too much time was let between the two phases of the test, and because the videos’ use was anyway very limited in time.

In other words, Grammar Rules have proved to be somehow beneficial for their users’ writing but not for their speaking. This fact does not reduce their potential: learners are provided with material that facilitates the understanding and remembering of problematic grammar rules, which should subsequently be reinforced by repeated use. If initially they can rely on the stories as facilitators, practice should then make their minds absorb and automate the application of the grammar rules.

4.3.6 Reaction to the Grammar Stories' presentation form

This section analyses three aspects of the testing website, in order to understand if they were effective and to what extent, to improve possible future developments. The three aspects analysed are: user's autonomy in choosing which content to watch and when, format of the stories, characters' descriptions as contextual information.

➤ Users' autonomy

Learners were free to access the website and choose whichever story they wanted, in whatever order. The project was meant to be used by learners who wanted to improve their English by working on common mistakes of Italian, and it was reasonable to think that many of the respondents tended to make these mistakes. However, for four stories out of six, what motivated them seemed to be curiosity, more than need (see Table 4).

The lowest score is that of "All by myself", which was believed to be "simpler" than it was, leading respondents to divide almost equally among the three options.

Only two stories/grammar rules were recognized as problematic: "Prepositions and Gerunds' Ball" and "Dancing". In fact, in the comments "Dancing" was acknowledged as the most difficult rule, and "Prepositions and Gerunds' Ball" was described as "surprising" because more regular than expected (when a verb follows a preposition, it is *always* a gerund).

Why did you choose this story?	To be forever alone	Speed dating	Present Sisters	P&G ball	Dancing	All by myself
It focus on a mistake I know I make / I am unsure about it	20%	19%	21%	52%	70%	28%
I did not know this rule	9%	4%	4%	11%	4%	24%
Out of sheer curiosity	68%	69%	64%	26%	19%	34%
Other	3%	8%	11%	11%	7%	14%

Table 4 – Data collected in response to Question 5 of each story questionnaire

However, are these independent learners really aware of their competence? Some help to answer this question comes again from the data of the interviewees answering the grammar test.

When accessing the Grammar Stories, the interviewees were reminded to start with those most difficult for them, unlike the other respondents who accessed the website completely on their own. When they took the grammar test for the first time, half of the interviewees committed from two to

five mistakes, while the other half committed all six; none of them got all the answers right. When they entered the Stories' Gallery, did they choose the stories whose mistake they committed?

Only one respondent watched all the stories related to the mistakes she had made in the grammar test (and she is the same that "corrected" all her mistake when she took the grammar test a second time). The others were able to pick one or more of the stories related to mistakes they had made in the grammar test, but not all. This happened also because of time constraints (watching all the stories and filling all the related questionnaire would take quite some time).

It is also interesting to note that "Dancing" was again judged the story focusing on the most problematic rule.

	Number of people who should have watched it (they got the related rule wrong in the grammar test)	People who actually watched it	Reasons (claimed by the users) for watching it
To be forever alone	6/10	5	Awareness of mistake: 2 New rule or unsure about it: 0 Curiosity: 3
Speed Dating	6/10	2	Awareness of mistake: 1 New rule or unsure about it: 0 Curiosity: 1
Present Sisters	7/10	5	Awareness of mistake: 3 New rule or unsure about it: 3 Curiosity: 2
Prepositions & Gerunds Ball	9/10	8	Awareness of mistake: 1 New rule or unsure about it: 1 Curiosity: 3
Dancing	9/10	6	Awareness of mistake: 5 New rule or unsure about it: 0 Curiosity: 1
All by myself	10/10	4	Awareness of mistake: 1 New rule or unsure about it: 2 Curiosity: 1

Table 5 – Data regarding the mistakes interviewees committed in the grammar test in relation to the reasons they gave for choosing their stories (Question 5 of each story questionnaire)

Looking at the general situation (Table 5), respondents chose a Grammar Story they needed (because they committed that mistake in the grammar test) 37% of the times saying they did it out of curiosity,

and 63% of the times out of necessity (awareness of mistake or lack of knowledge). This seems to show that they were able to recognize which grammar rules were problematic for them. It also means that an independent and self-regulated learning activity can be fruitful even if it implies an autonomous evaluation of strength and weaknesses. This said, the addition of a digital tool that could help learners identify their insecurities would be of great help.

➤ Types of video

As already mentioned in 4.3.3, live-action Grammar Stories have been largely preferred compared to the one made in animation: 91% of the respondents agreed in judging positively the short movie format (Table 6), and 90% did it for the video-stories that included filmed material (Table 7), while only 76% expressed the same positive judgement towards the video story with animations (Table 8).

FORMAT: Short movie (“To be forever alone”, “Speed Dating”, “All by myself”)

	Trenchant	Engaging	Easy to understand	Interesting	Pleasant
Strongly disagree	0%	0%	1%	0%	1%
Disagree	3%	8%	1%	5%	1%
Agree	37%	35%	34%	43%	35%
Strongly agree	53%	51%	61%	50%	50%
I do not know	7%	6%	3%	2%	3%

Table 6 – Data collected in response to Question 18 in the story questionnaire of “To be forever alone”, “Speed Dating”, “All by myself” with two highest scores highlighted for each

FORMAT: Video-story with live action filming (“Present Sisters”, “Dancing”)

	Trenchant	Engaging	Easy to understand	Interesting	Pleasant
Strongly disagree	0%	0%	0%	0%	0%
Disagree	4%	7%	9%	4%	1%
Agree	36%	32%	27%	44%	24%
Strongly agree	56%	56%	60%	51%	69%
I do not know	4%	5%	4%	1%	6%

Table 7 – Data collected in response to Question 18 in the story questionnaire of “Present Sisters” and “Dancing” with two highest scores highlighted for each

FORMAT: Video-story with animated drawings (“Prepositions and Gerunds Ball”)

	Trenchant	Engaging	Clear & easy to understand	Interesting	Pleasant
Strongly disagree	0%	4%	0%	0%	0%
Disagree	26%	22%	11%	22%	11%
Agree	48%	52%	41%	44%	55%
Strongly agree	22%	18%	44%	30%	30%
I do not know	4%	4%	4%	4%	4%

Table 8 – Data collected in response to Question 18 in the story questionnaire of “Prepositions and Gerunds’ Ball” with two highest scores highlighted for each

One might think this is because of the amateurism of the latter, but that is not the case. The fact is that respondents showed clear appreciation and preference for the presence of live actors, and enjoyed the space of empathy and identification it allowed for.

These are some of the comments in support of live action over animation: “The live action format is clearly superior to the animations, because it is less neuter and therefore easier to remember”; “I don’t think animation is the way to go. I personally feel more involved by the presence of live actors”; “It seems to me that the story ‘Prepositions and Gerunds’ Ball’ was less clear, maybe because its characters weren’t real.”

Moreover, two of the interviewees made an interesting observation when they said that they perceived animation as a product for children, and personally felt less inclined to paying attention because they sensed the content as “dumbed down”.

The presence of the writings seemed not to have made a big difference. In the comments, there were respondents wishing for more written aids on the video (like balloons, or information superimposed on the video) and others who complained about them because they were tiring and distracting. Further research is needed to clarify this aspect.

➤ Characters’ description and contextual information

The majority of the respondents looked at all the descriptions of the characters (68% for “To be forever alone”, 56% for “Speed dating”, 75% for “Present sisters”, 63% for “Prepositions and Gerunds Ball”, 74% for “Dancing”), with the only exception of “All by myself”, for which only 48% looked at them all, 38% only some, 14% none. This is unfortunate considering this story’s

introduction was fundamental to identify the correct description of the grammar rule in the questionnaire, and it might be the reason why some respondents found it hard to do.

The respondents visualised them for different reasons, depending on the video. For “To be forever alone” and “Speed dating”, the majority of the respondents (respectively 62% and 85%) did it out of curiosity. In the case of “Present sisters” and “Prepositions ball” they split, with almost the same number of respondents (respectively, 44% and 40%) visualising them out of curiosity and in order to verify what they already knew. For “Dancing” (which, as we have seen, proved to be the most challenging content) 50% of the respondents visualised the descriptions to check what they knew and 39% to fill a gap in their knowledge. Finally, for “All by myself” there is a tripartite situation: 44% acted out of curiosity, 28% wanted to verify their knowledge, and another 28% needed to fill a gap. For all the stories, the majority (84% average) visualised the characters’ descriptions before watching the video. Since they were placed inside shrinkable windows which needed to be clicked to be shown, it was important to ensure users understood how to use them, and it seems like they did.

The majority of the respondents judged the descriptions not essential but useful, in particular for “Dancing” (55%), but also for “Prepositions and Gerunds Ball” (37%), “To be forever alone” (35%) and “All by myself” (28% useful, plus 31% fairly useful). It is interesting to note that for “Present sisters” 39% of the respondents considered the descriptions useful, but 46% judged them superfluous; this rule is considered to be very basic, and learners might think they have full knowledge of it, despite the fact they get it mistaken or not. In the case of “Speed dating”, another basic rule, the description was no doubt judged as superfluous (48%), and this makes more sense because the linguistic items involved are usually the first encountered when starting to learn English.

These data might raise some doubts on the utility of the descriptions, but it is clear they play an important part in the delivery of the information and should not be removed. Two respondents commented they were “too long” and “boring”, but five others praised their clarity and one said they were fundamental for a full understanding of the story: “the story would have not been as effective without the short and clear explanations.”

The video stories were said to be perfectly complemented by the contextual information. They provide help in case of a gap in the knowledge, and this implies the material can adjust to each learner, regardless of his/her level: if they need the information, it is there; if they do not need, they can simply ignore it.

4.4 Conclusion

The Grammar Stories encountered the favour of the adult independent learners of English involved. They appreciated their transforming of something abstract into something concrete and visible, and also their use of live actors, which allowed for a strong engagement of the learners since it triggered recognition and empathy. The stories were considered amusing, pleasant, and clear. Moreover, the presence of the contextual information was appreciated because it provides help in decoding the video and therefore allows also beginner students to get access to the content. The Grammar Stories in their context proved to be a self-learning tool able to adapt to different levels.

When it came to understanding, having access to a visual and narrative rendition of the grammar rules was judged as an easier way of access the rule compared to the usual textual explanation.

In terms of remembering, the results were not as positive but encouraging: all learners provided at least a partial recollection of the grammar rules, also proving the efficacy of videos, since their memories were often visual and related to the narrative components of the Grammar Stories. A third of them experienced tangible benefits, among which the most consistent was that of an enhanced awareness of common mistakes, sometimes leading to self-correction. The long period in between watching the stories and filling the follow-up questionnaire might have influenced the result of this part of this experiment, and further testing would be needed.

The way the Grammar Stories were delivered was effective, but could be improved, for example with the addition of an automated test to help learners identify their weaknesses.

Chapter 5.

EXPERIMENT B: First Field Trial of the WORKSHOP

The experimental field trial was designed according to the research objectives and with the aim of enabling the students to have a satisfactory experience. It ended up taking the form of a workshop, which intertwined different topics (storytelling, foreign language, digital production) and modalities (lecture, flipped classroom, group work).

Section 5.1 clarifies the goals of the trial. Section 5.2 provides a complete description of its content. Section 5.3 presents the data collected, and Section 5.4 their analysis. Some conclusions are drawn in 5.5.

5.1 Goals

The first goal set for this experiment was specific of this trial: the experimenter had created the storification procedure and was the only person to apply it and test it; she codified it into a step-by-step process in order to enable other people to use it, and it was necessary to test if it could be understood and applied by people other than her.

Since this was the first attempt at sharing the storification procedure with a class of students, its first and most important goal was that of finding out if the students could understand and apply the procedure as it was schematized. If not, it would have had to be reconsidered.

Second (but not less important), because the storification procedure was created with the aim of providing learners with a new technique to understand, memorize and retain information, it was also necessary to evaluate if the active application of the process could affect students' linguistic competence, and how.

The third goal was that of evaluating the workshop. This experiment constituted also its first trial, and so it was necessary to investigate if it was working well, if something needed to be changed to make it more effective in the future experimentations. Particular attention was given to the following four aspects:

- Students' interest: It was important to find out if this experience would be judged as interesting by the students, since interest and curiosity are fundamental in activating the acquisition of new information. This aspect is very important in the frame of the humanistic-affective approach here assumed (2.4).

- Students' understanding / Clarity of the presentation: In order for the students to apply the storification procedure, they need to understand it. The workshop was designed so that it provided a theoretical framework to enable students to do so. The storification procedure itself was broken down into a step-by-step process in order to be easier to understand and apply. Verifying if the way the material was shared was effective was fundamental to find out if something needed to be changed in the next experimentations. Also, it provided feedback on the way the narrativization process was presented and on the clarity of its representation.
- Group work: In the workshop, it was decided to propose the application of the storification procedure as a class activity that requires to work in groups. It was important to evaluate if this decision led to benefits or not.
- Students' evaluation of their products: At the end of the lab, the students were asked to present the product (a video, or an illustrated text) they created. What was their opinion on it? Asking them to judge their and the other students' product they were given the opportunity to offer feedback also on the process which led them there. Also, the satisfaction they might experience was linked to their motivation to use the storification procedure again.

In conclusion, these were the Research Questions this experiment aimed to answer:

1. Can the storification procedure be correctly applied by people other than its creator?
2. Does the active application of the storification procedure have an effect on students' understanding, memorization and language learning? How?
3. What is the students' reaction to the workshop in general?
 - a. Are the students interested? How is their reaction from an emotional and behavioural point of view?
 - b. Is the content organised and shared in such a way that the students can clearly understand it?
 - c. If the storification procedure is applied as group activity, what are the results? (How does it work? Can this process be shared among all the group members? Can more people cooperate to the creation of one story? Can this technique reinforce cooperation among the students?)
 - d. What are the students' opinions on the products they created?

5.2 Description of the experiment

The class involved in the first exploratory field trial was a Liceo Classico⁴⁴ class of 25 high-school sophomore students (15 or 16 years old).

The exploratory field trial consisted of three meetings: the first was held on Monday June 5, 2017; the second on the following day, Tuesday June 6, 2017; and the third on Thursday June 8, 2017. The meetings are described in detail in the following sections.

The meetings were held in the laboratory of the school, where computers were available to the students. While working on their stories, each group had a laptop with WindowsXP and connected to the internet.

5.2.1 First meeting

The first meeting was held on Monday June 5, 2017 (see Appendix 2.1 for slides). It lasted two school hours, for a total of 100 minutes.

The experimenter introduced herself and illustrated her PhD project to the students (slide 2). After the introduction, she explained what a story is from a narratological point of view, highlighting the need of events in order to “make something happen” (slides 3-9).

After this, she focused on the second fundamental element of every story: characters. She explained how humans, animals, objects, or even ideas can become characters of a story, and she provided examples (slides 10-14).

The examples of characters visualizing abstract concepts (for example, emotions in the movie “Inside Out”) were particularly significant: they were created transforming something invisible into something visible, and this is exactly what was asked of the students involved in this experiment. For this reason, some time was devoted to discussing these examples. The experimenter focused on two characters, both representing the emotion of rage: one is the character in the movie “Inside Out”, the other appears in a French book for children titled “Grosse colère!” (Italian title “Che rabbia!”, in English it translates as “I’m so furious!”) written and illustrated by Mireille d’Allancé. They are both red and have a connection with fire: Disney’s Rage grows flames on his head when he gets mad, and the book’s Rage has a body that seems made out of fire, not defined and blurry when he moves. They are both human-like and have a stout figure. Talking about differences, Rage in “Inside Out” is short

⁴⁴ The Liceo Classico is a high-school with a strong focus on the humanities. The name of the school is not mentioned for privacy reasons, but the experimenter can be contacted for further information.

and dressed like an office worker, whereas Rage in the book is tall, massive, and reminds of children's book traditional monsters.

The experimenter asked the students to think of the emotion these two visualize and identify their main features. The discussion was meant to provide the opportunity to illustrate the process of visualization, in particular visualization of abstract concepts. This is fundamental for that of storification.

After the discussion, the experimenter took some time to explain the experimentation in detail (slide 15), so that the students would know why they were asked to perform the next tasks.

After the digression, the experimenter went back to the concept of visualization, this time focusing on what the students were going to do for the field trial. She provided three examples to clarify the process of visualization in relation to grammar rules. First, she showed them "Speed Dating" (slide 16). Second, she showed them "To be forever alone" (slide 17).

The experimenter then asked the students to analyse the characters as they did for Rage, keeping in mind that the new examples were meant to visualize linguistic elements (slides 18-19).

Their observations were used by the experimenter to illustrate the process of visualization, which constitutes the first step of the storification procedure: students needed to isolate and identify the linguistic elements involved in the grammar rule, and then they needed to identify key characteristics of those elements, then use them to create visual metaphors and therefore characters (slide 20).

To show them other viable options for this process, the experimenter provided another example: a Ted-Ed video titled "A Comma story". This is an animated video on the use of the Oxford Comma, where the character Comma is shaped like a comma but has the features of a sweet little girl dealing with Conjugations, strong men dressed like construction workers. Comma is always ready to help others: she helps the Conjugations by standing in between sentences, so that long periods are chunked and manageable. The Conjugations are represented as labourers because they work a lot: they are all over the texts, and fundamental for meaning.

Viewing "A Comma Story" aimed to show the students they did not have to create a story with human characters (like "Speed Dating" and "To Be Forever Alone"): they could free their imagination, and give their characters the features they desired, as long as their choices were consistent with the metaphor and what they represented (slides 21-23).

Finally, the experimenter showed a scheme summarizing how to perform the visualization and create what she called "landing image" (slide 24). The landing image is a visual metaphor of the grammar rule. This image would need to become a frame of the last scene of the video. It would define the end of the story the students were to create.

The students were then divided into six groups. They were given some time to discuss, and together create the landing image for their story.

When the lesson resumed, the experimenter went back to the narratological definition of “story”: it needs at least two images, two moments in time, differentiated by at least one trait. This means that one image is not enough, and that the landing image needed to be complemented with at least another one. We already had the end, but we needed a beginning. This image was named “starting image” (slide 25).

The students were presented two options for creating a starting image: the first option led to the storification of the grammar rule only (slide 26), while the second option included in the storification also a common mistake related to that rule (slide 27).

The explanation ended with the schema summarizing the whole process, which was left visible on the screen (slide 28).

Every group of students was assigned one grammar rule. There were three grammar rules and six groups, which meant each rule was going to be “storified” twice, by two different groups working separately.

Each group was given a worksheet (see Appendix 2.2) with the grammar rule assigned, and a template which was meant to guide the students through the process. They were given time to brainstorm ideas and start writing down their stories, with the help of the experimenter.

The first part of the meeting was dedicated to the explanation, and the second part to group work. The students were asked to finish the story at home and take it to class on the following day.

5.2.2 Second meeting

The second meeting was held on Tuesday June 6, 2017 (see Appendix 2.3 for slides). It lasted three school hours, for a total of 150 minutes.

The meeting started with a revision of the storification procedure’ scheme seen the day before (slides 2-4). Then, the students were told each group had two options for the story it created: it could be turned into an illustrated text or into a video (slides 5, 6).

Before having them choose which format they wanted to realize, the students were provided extensive instruction on both options: story construction (slide 7), writing (slide 8), illustration (slides 9-12), page composition (slides 14-16), video production, for which students received information on how to write a technical script (slides 17,18), types of shots (slides 19-29), basic camera angles (slides 30-31), basic camera movements (slides 32-34), basic rules for shooting (slides 35-37), suggestions on

how to use the gear available to them (slides 37, 43-45), with a special focus on how to shoot good quality videos using a phone (slides 38-42), and finally how to edit what they filmed (slide 46).

This long explanation ended with final remarks on the importance of correctly delivering the designed information (the grammar rule), of using imagination, and accurately managing time (slides 47-50).

The explanation lasted a little bit more than one hour. Then the students had time to discuss and evaluate the information they received, in order to choose the format they felt better suited their story.

In case they decided to produce a video, they were provided with a script template (see Appendix 2.4) and a summary of the terminology they needed in order to fill it (see Appendix 2.5).

With the help of the experimenter, they finished writing the stories and started to produce them. They finished the work at home, with support of the experimenter via email.

5.2.3 Third meeting

The third meeting was held on Thursday June 8, 2017. It lasted only one hour, during which the products created by the students were showed to the class and commented.

At the end, some time was dedicated to distributing the questionnaires and having the students fill them in.

5.3 Data collected

During this experiment data were collected through four channels: experimenter's diary, the stories created by the students, a questionnaire administered to the students, an interview to the English teacher.

The experimenter wrote diary entries after every meeting, describing what happened in class. An English version of these accounts is provided in Section 5.3.1. These accounts were meant to help adjust the way content was to be proposed in future experiments. They also helped better the content itself, providing an insight on how people other than the experimenter navigated through the storification procedure.

The stories created by the students are presented in Section 5.3.2. They are a precious source of information, since they offer an insight on the students' creative process and on their elaboration of the information provided.

At the end of the laboratory, a questionnaire (see Appendix 2.6) was administered to the students. It had fifteen questions. The data collected are presented in Section 5.3.3. It provided the students with the opportunity to say if they encountered difficulties, and in general express their opinion anonymously: this is very important with adolescents, who often struggle when asked to express their opinion in front of their peers.

Section 5.3.4 presents the fourth data source: an interview to the professor of English of that class. She was present throughout the whole experiment, and she knew the students and their abilities better than anyone. Collecting her opinions and observations was fundamental to understand what happened in class.

5.3.1 Experimenter's diary

The experimenter wrote an account of what happened in class after every meeting. Here are the descriptions of those meetings informed by mentioned accounts.

❖ First meeting

When the students entered the room, everything was already set and the experimenter was waiting for them. Tables and chairs had already been arranged into groups. The students sat down. The classroom was long and narrow, with very high ceiling. The experimenter realized this was going to impact the sound of her voice in it. Therefore, during the whole meeting she tried to speak clearly and loudly enough to reach the students at the far end of the room. She also asked a lot of questions, often looking at them, to be sure to involve them.

The lesson started, and the students listened in silence. They looked intrigued. When the experimenter asked the first questions, they answered, even if shyly.

When she asked them to name the characteristics of a story, they answered it has a beginning and an end, it has characters who are involved in different situations and interact with each other, there are obstacles. They were confident in their answers, revealing an existing knowledge which pleasantly surprised the experimenter.

The explanation continued, and she talked about characters. When she presented the examples, the students started chatting and commenting as they recognized the characters. She indulged with them in this discussion, to support their active contribution, and then used this new energy to involve them in a discussion about the two different representations of Rage. The students were able to pinpoint

the value of colour (red) and shape (messy, chaotic) in the given examples, and also noted they were given anthropomorphic features.

The experimenter decided to pause and explained the reasons behind her research. The students listened in silence, but from their expressions it was not clear if they were following what she was saying or if they were interested.

The experimenter resumed the explanation and mentioned the rule for conjugating verbs at the Present Tense. She started the video “Speed Dating” but the audio did not work. The English teacher went to look for the IT technician, and the students started chatting loudly. The experimenter tried to get their attention back, but this was not possible until the technical problem was resolved: when she finally played the video, there was immediate silence as all students directed their attention to the screen.

After the video, the experimenter asked the students what happened in going from the rule to the video they watched. No one answered. One student asked to repeat the question, which the experimenter did, trying to simplify it.

A girl replied that the pronouns had become characters, so the experimenter asked, “How are these characters?” The students were very good in identifying the features that characterised each character: character I was busy taking selfies, the We girls talked with each other only, etc.

Then the students were asked to describe what happens to these characters. It did not take long for them to say that He ends up talking only with She, He, and It. A male student reacted to this answer by commenting several times “He is interested only in She, I hope”. The experimenter took a mental note of this remark, and realized she needed to be careful with what she said to not start an ideological discussion.

The same analysis was then carried on a second example, “To be forever alone”. The students had a harder time analysing this video: its characters were less characterized than the ones in the other video, and students went looking for meanings that were not there. For example, a girl thought the colour of the clothes was meaningful (in fact, in “Speed Dating” She is the only one wearing red). In fact, it was the English teacher who noted that the characters were divided according to their gender: all verbs were male, all past participle were female.

One student raised his hand and pointed out that it is not true that the Past Perfect employs only the auxiliary “to have” because it builds its passive form using “to be”. The experimenter had not taken this into account and had not specified the video referred to the active use of the tense only. She did it and thanked the students for his observation.

After this, the experimenter started a long explanation on the process of visualization and storification. The students listened in silence, and the experimenter could not tell if they were

following her. This part was the one which worried the experimenter the most: it required the students' ability of abstraction, and she went back several times to the concepts she considered fundamental and particularly difficult. Even if prompted, the students did not give any feedback. From their faces it was not possible to understand if they were confused by what she was explaining or bored by the repetition because they got it the first time.

During the explanation, the students repeatedly asked when they were going to be assigned the grammar rule.

The experimenter could hear that some were already assigning acting parts to their groupmates, others were terrified by the idea of being in front of a camera; so, even if this was going to be the subject of the following meeting, she explained they had two options: shooting a video or writing a story.

To prove to them they did not need live actors, the experimenter showed them "A comma story" and they analysed it, as they did for the other videos. The students noted Comma was small, shaped like a comma, and the experimenter added that Comma was also kind with the other characters, and always offers to help them. The students also noted that the Conjugations were strong, the Subordinates heavy and grouchy. The experimenter highlighted how in Italian we define "heavy" ("pesante") someone who is boring or too serious, which means we apply the same metaphor used here. One student also noted they are all anthropomorphic.

Their focus was getting increasingly weaker: they wanted the rule and start writing the story. The experimenter did her best to maintain their attention and explained the scheme to apply the visualization process. This passage was fundamental for the success of the whole activity, and the experimenter wanted to make sure it was understood. However, when she asked for feedback, she did not receive an answer.

Half an hour before the end of the meeting, the experimenter finally distributed the grammar rules and related handouts. She started going from one group to the other, to observe their work and support it. She reiterated the importance of following all the steps in the right sequence. She also encouraged them to brainstorm several ideas, and then pick one. However, what the majority of the students did was developing the first idea they came up with. They also characterized their characters as they were creating the image, instead of first brainstorming adjectives and pinpoint key actions.

Fifteen minutes before the end of the meeting, some groups had already created their image and started asking about the story. Because they started making up stories without knowing the procedure, the experimenter decided to anticipate the scheme of the storification procedure she planned on explaining the following day.

She asked the students if they had their landing images ready. Some replied yes with conviction, other were doubtful because they were still working on it. The experimenter said she was going to explain them how to create the whole story, and they would finish it at home. She did so because this would make the second meeting better manageable. While she was explaining, the students were in turmoil and kept discussing with each other.

The meeting ended with the scheme summarizing the whole storification procedure. One of the students took a picture of it and said she would share it on the class' WhatsApp chat.

❖ Second meeting

The chairs were arranged differently in order to form three rows close to the board and the experimenter. When the students entered the classroom, they were asked to sit there and told they would go back to work in groups later.

The experimenter explained that she was going to present them how to produce their stories into a video or a short text. The explanation lasted 45 minutes and the students paid close attention to it. Sometimes they interrupted or started chatting but as teenagers would usually do, and it was easy to have them refocus.

Observing their reactions and their comments, the experimenter soon understood the students were paying attention because they considered video production and digital graphics something cool.

She started the explanation using simple vocabulary and presented the basics without going into too much detail. She noted students looked not impressed and doubtful. So she decided to challenge them a little bit, and started using more technical terms and more elaborated concepts to see their reaction. The change was visible: the students started looking at her with more interest and respect. They maintained this new attitude for the rest of the lab.

When the experimenter talked about the rules for graphic composition, some students were nodding enthusiastically.

The only moment the students looked puzzled is when someone asked where the illustrated texts would be published, and the experimenter replied they would be shareable online but did not specify a container.

When the explanation regarding script writing started, the experimenter asked the students if they had ever read a script or were familiar with this type of texts. Three students said they realized a short film with a professor the year before, but it was the professor who wrote the script. Considering this, the experimenter asked them to look at a script example and describe it. All the class joined in, and

together they gave a definition of script and described it. Then the experimenter presented a template for technical scripts. The students found it a little bit difficult to understand, but from their reactions it was clear they were enjoying learning something new and which looked “difficult”.

The explanation went on, with the experimenter constantly engaging the students in it by asking them questions. The students actively contributed, without too much effort on the part of the experimenter. On the contrary, they were eager to show they too had knowledge in that field.

When the explanation was over, the experimenter asked if there were any questions, but the students were impatient to start, so she let them divide into groups and start working. Then, she started going from one group to the other, to check on their work and guide them, and did this for the following two hours, while making several observations.

She noted the stories were heavily influenced by the personality and interests of the members of the group, some of them being very unusual. Group work seemed to work as she estimated that 90% of the students looked like they were actively contributing to the activity (this value lowered to 80% towards the end of the meeting). The grammar rules were not equal in difficulty, causing the groups with the simpler rules to be done when the others were still working on theirs.

Something the experimenter noted is that only two groups used the template she gave them to guide them in building the story (see Appendix 2.2). This handout was meant to help the student fulfil the process following the correct sequence, which means defining the landing image (end) first, then the starting image (beginning), and then linking them to create the story.

Despite this, almost all the groups were able to apply the process (we will see this in detail when analysing the students’ stories in Section 5.3.2).

During the two hours of work in class, the experimenter was able to get to know every group and gave them suggestions.

The group that would go on to write the illustrated text “A special taxi” had finished writing the story during the first meeting. They sent it to the experimenter via email, and she revised it and replied. On the second meeting they applied the corrections, and then decided to create an illustrated text. They did not know how to draw the images. Two members of the group spent the majority of the time in class trying to master Paint but were not happy with the result and ended up giving it up. The third member of the group helped them intermittently, often getting distracted or asking to go to the restroom.

The group that would go on to produce the video “The soccer game” wrote a first version of the story which was not correct: instead of “storifying” the grammar rule, it contextualized it by having some characters engage in a dialogue which contained examples of the rule. The experimenter pointed this

out and suggested they started all over again. They created a new image and called the experimenter to check on it. She said it could work and encouraged them to go on and add details.

The group that would go on to write the illustrated text “Hermit crabs” wrote the story both in Italian and in English. The experimenter checked it and encouraged them to add sensory details and make it richer. They tried to draw pictures using Paint but were dissatisfied with the result and trashed the drawing attempts they had made.

At the beginning of their work, the group that would go on to produce the video “Past Simple (Puzzleville)” visualized both the Past and the suffix “-ed” as houses. The experimenter suggested they differentiated them, making “-ed” a guest house, a terrace, or anyway a place smaller but somehow connected to the house. One of the girls was into stop motion and enthusiastic about the activity. Her enthusiasm was contagious, and all the group members gave their contribution. They were detailed oriented: the experimenter could hear them discuss about the name of the city for quite a while.

The group that would go on to produce the video “Past Simple (The Hammer)” had created only one image when the experimenter went to talk with them. The visual metaphor was very unique, but it was not enough to have a story. The experimenter encouraged them to develop their idea and revised the storification procedure with them. One of the students was very distracted and playing on his computer, sometimes pulling other members of the group away from the assigned activity.

The group that would go on to produce the video titled “The family” was very excited about the activity. All of them looked forward to creating the story, dressing up and acting. They thought of having Love as one of their characters, but the experimenter pointed out it was not visible and that they needed to turn it into something concrete. She also suggested them to use clothes and accessories to characterize every character. The girls were happy to take this advice.

❖ Third meeting

The students entered the room and sat on the chairs that had been arranged in rows in front of the screen. They were very excited about watching their products and it was not easy to get attention and silence. While the experimenter was collecting and arranging their files, they could see the projection of the computer screen on the board and commented profusely.

The experimenter opened the first file and one of the students of that group complained about theirs being the first. Others joined in. The experimenter said she would show them in the order in which she received them and stuck to this decision in spite of the complaints.

The first file to be visualized was that of the story “Hermit Crabs”. The experimenter asked the group if one of them wanted to read it aloud. All the students started discussing, and the noise level rapidly increased, so the experimenter had to recall their attention. The students asked that she would read the text. The experimenter agreed but, since the noise level was still high, she said she would do it only if they did not force her to scream. The students went quiet and the ones who did not were hushed by the others.

The experimenter started by emphatically reading the names of the authors, making them giggle. While she was reading the story, the majority of the students (with the exception of two or three) paid close attention, some of them exchanging smiles with the authors. The authors looked a little bit embarrassed but also happy. At the end, all the students applauded.

As soon as the applause faded, they started talking and exchanging comments, and again the experimenter had to ask for silence. She pointed out how the three protagonists of the story, He, She, and It had been characterized to make them different and coherent with the correspondent pronoun. The students received the information without any reaction.

The second story to be shown was “A special taxi”. As for the first one, the experimenter started by reading the names of the author in an emphatic tone that made the students giggle. When she started reading the story, all were silent and paying attention. The students smiled and laughed at the pictures. There were some mistakes in the text, but the experimenter ignored them. The English teacher, who was present, corrected them aloud and made comments, and some students started to pay attention both to the story and the teacher, checking her reactions to what was being said. The authors were staring at the screen intently, sometimes whispering to their fellow students to explain why they chose certain images. The end of the story was greeted by an applause, the authors smiling proudly.

They started chatting but this time it was easier for the experimenter to get them to pay attention and be silent again. The few who went on talking were hushed by their mates. It was clear they were all looking forward to continuing watching the stories.

The third story to be shown was “The Soccer Game”. One student of the group said they had problems with the editing, and some scenes might be missing. The students laughed a lot while watching, but some of them were also asking “Who is that? And that?”

This video too ended and was celebrated with an applause, while the authors were smiling happily. The experimenter asked the group if they wanted to add something. One of the students explained that they wanted to show the second sentence better, to deliver the information more clearly, but something happened with the video file and it was cut.

The experimenter summarised the grammar rule delivered in the video, in an attempt to set this information in the students' minds. The students listened.

The fourth story to be played was "The Family". Its creators proudly raised their hands to denounce their authorships. As the video started, the ones talking were hushed by their mates and all the students directed their attention to the screen. There were laughs and compliments for the actresses. The video ended and was applauded. Almost all the students were smiling, while the authors were drying laughing tears.

The fifth story to be shown was "Simple Past (Puzzleville)". All the students looked at it intently, in silence. Some of them commented "Wow", or "It's beautiful!" ("E' bellissimo"). They applauded, and this time did not start chatting, but quietly commented with each other. They looked very impressed.

The last story to be shown was "The Simple Past (The Hammer)". Again, there were some laughs, especially when one of the characters makes a contemporary dance move. The authors stared at the screen in silence, one of them suffocating an embarrassed laugh, the others deadly serious except for when their mates were laughing: then they would laugh too.

This video was the last one. After it, the experimenter tried to start a discussion about what they had seen. She asked the students if they had any comments. They looked at her without reacting, so she narrowed her question and asked what, in their opinion, has been communicated clearly, what could be done differently.

One student timidly said they would have liked to have more time and was immediately joined by others. The experimenter agreed with them, and explained how this field trial was the first one and how their feedback was fundamental to allow improvement.

The experimenter asked another question: considering they knew the grammar rules they had been working on, and considering they knew how the storification procedure works, was there something they thought was brilliant? Or something they would have done differently? The students looked at her and did not reply. To give an example, she said that maybe a presentation of the characters at the beginning of the video would have been useful to clarify the meaning. The groups who had a presentation raised their hands to point that out.

Since there were no comments, the experimenter asked them how they liked the workshop. One student answered it was fun ("Divertente") and all the others echoed her.

Seeing the lack of response, the experimenter moved to explaining the function of the questionnaire, and highlighted again how important their help was, them being the first test subjects. One student

asked the experimenter how the experience was for her. She answered to be very satisfied and explained why. The students applauded her.

After that, the class received the visit of the vice-principal, who asked to watch one of the videos to have an idea of the workshop. The experimenter distributed the questionnaire, and then spent some time explaining the vice-principal what they have been doing. The students filled the questionnaires and handed them to the experimenter.

When the bell rang, while leaving the room, they passed by the experimenter to thank her and say goodbye.

5.3.2 Students' stories

Here are reported the stories created by the students. For each of them are here provided: the rule assigned (and the common mistake if included in the story), the format chosen between video and illustrated text, and some notes on how the group behaved during the activity on the basis of the observation lead by the experimenter. Images are provided to complement the written account.

A special taxi

Rule assigned: Conjugation of 3rd singular verbs

Format: Illustrated text

Story: The Pronouns are a group of people waiting for a taxi to take them home after a night out. When a taxi arrives, they all try to get in. The pronoun I is visualised as a young, slim and tall boy; he is unable to get in the taxi because of his height and decides to go back to the bar. The pronoun You is large, fat and cannot get through the car door (Fig.11), so he tries the window but it does not work, so he decides to lie down on the concrete and just sleep there. The pronoun We is visualised as two teenagers who are so focused on their cell phones (Fig.12) that they miss the car door and get lost in the night. The pronoun You is represented by two elders who fail to get in the taxi and end up sitting on a bench where they spend the night. The pronoun They is a group made of so many people that they would not fit in the taxi and so decide to take a walk to the harbour.

In the end, there are only three people left: She, It and He. They manage to get on the taxi, and it is only then that they notice on its front is a writing: "Verb+s".

The story closes with this sentence: "They got on board to find out that strange people need "s" at the present simple."

Notes on the group work: This group was made of four students. Three of them were very active, while one was easily distracted and cooperated intermittently. One of the active ones spent a lot of time trying to figure out how to draw the scenes using Windows Paint. They ended up giving up this idea when they realized digital drawing would take too much time. They opted for taking pictures of themselves representing the scenes and combined them with images they found online for the elements that they could not recreate in real life.



Fig.11 – The pronoun You tries is too large for the taxi



Fig.12 – The pronoun We have eyes for their phones only

The Soccer Game

Rule assigned: Use of the Present Perfect Continuous

Common mistake: Using the Present Tense

Format: Video

Story: The video opens with a shot of people greeting each other in a soccer field. On the back and front of the players' shirt are their names, so that we know that among the players are For (wearing the team jersey), Since (wearing a black t-shirt), Present_Perfect_Continuous (wearing the team jersey), Present_Tense (wearing the team jersey), 2001 (wearing a white t-shirt), Then, they start playing soccer. Present_Tense tackles For and the two fight to get the ball. Present_Tense's team is granted a penalty kick. The other team members get in line. Among them is Since, whom For approaches with the intention of taking his place (Fig.13). The two have an argument, until For succeeds in getting rid of Since and taking his place in line. In a close shot, we see that the defensive line is composed by Have Been, Verb+ing, For, 2001 (Fig.14). Present Tense kicks the penalty and scores, because For jumps and lets the ball pass.

The game resumes. This time it is For who violently tackles an opponent, whose team is granted a penalty kick. For places himself in line with the others, but this time Since insists on taking his place

in line (Fig.15). He does so and For sadly leaves the field while a melancholic piano soundtrack plays (Fig.16). The new defensive line including For works and stops the penalty kick.

After this, we see Present_Tense scoring several points in a row, and it looks like his team is going to win the match. Then Present_Perfect_Continuous, who obviously belongs to Present_Tense's rival team, enters the field and scores several points, leading the game to a tie. The last scene shows the players congratulating each other and leaving the field friendly chatting.

Notes on the group work: This group included three students who were enthusiastic about the activity and three who were not. They shared a common passion for soccer; knowing they could include that in the story made the activity more appealing for all of them. However, contribution was not consistent from all the members.



Fig.13 – For wants to take Since's place



Fig.14 – The defensive line made by Have Been, Verb+ing, For, 2001



Fig.15 – Since insists to be back in the place For unsuccessfully took



Fig.16 – Sad for the rejection, For leaves the field

Hermit Crabs

Rule assigned: Conjugation of 3rd singular verbs.

Format: Illustrated Text

Story (as written by the students): “Once upon time there were eight hermit crabs that were looking for the shells suitable for each of them so that they could come out of the sea during a very sunny day. They were called I, You, He, She, It, We, You, They (Fig.17).

Five hermit crabs (I, You, We, You, They) walked towards their shells in a secure and decisive manner, while She, He and It were walking slowly and unsure: they could not find the shells that would become their future homes. The houses of the five hermit crabs were called “Verbs”.

The other hermit crabs (He, She, It) started a long and difficult trip to find their ideal home as they were bigger than the others and so they needed bigger shells (Fig.18). At the end She, He and It found their comfortable home, called “Verb+s.”

Notes on the development: The group spent a lot of time trying to figure out how to digitally draw the images, and this took time away from story writing, which was particularly important since this story was to be presented in text format.

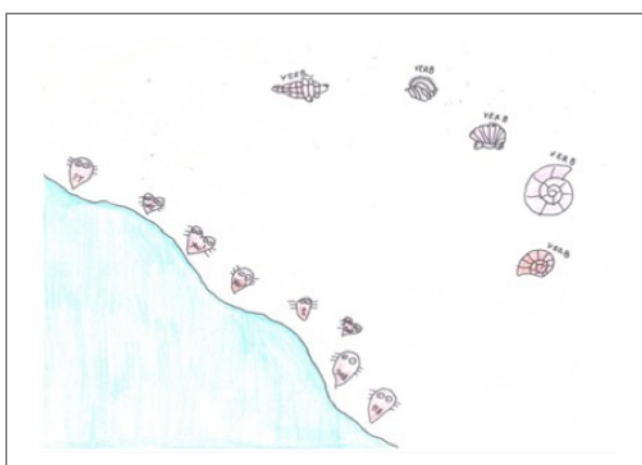


Fig.17 – The hermit crabs (pronouns) on the shore

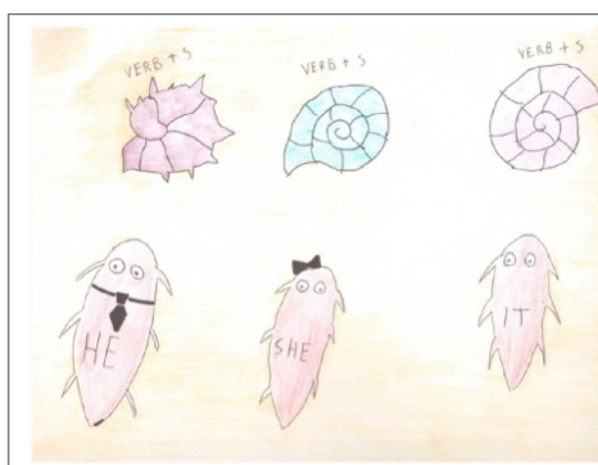


Fig.18 – The hermit crabs He, She, and It find their shells Verb+s

Simple Past (Puzzleville)

Rule assigned: The use of Simple Past, Regular and Irregular Verbs conjugation

Format: Video - This video was created by using a combination of drawings and written text. The drawings were animated, so that the characters would perform simple basic movements like moving the arms up and down, moving from one place to another or changing the facial expression.

Story: The two main characters are two pieces of puzzles: one represents a Regular Verb, and the other an Irregular Verb. The third character is half a piece of puzzle with a walking stick representing the ending “-ed”. They are presented at the beginning of the video (Fig.19).

The story is set in Puzzleville, where R.V. (Regular Verb) and I.V. (Irregular Verb) are best friends (Fig.20). As time goes by, I.V. ages while R.V. always stays the same. One day, I.V. decides it is time for him to go live in the House of Past Simple (Fig.21), which is a beautiful retirement home, whose three storeys represent the three main uses of the tense (Fig.22).

R.V. is very sad to see his friend leave, but he has not aged so he knows he is not admitted there. While he is sobbing by himself, he meets -Ed. They like each other (Fig.23). As soon as they combine, R.V. ages all of a sudden (Fig.24): he is now old and can be admitted in the Past Simple house with his friend.

Notes on the group work: This group put a lot of effort in their story and it shows. All the members of the group proved to be very creative and contributed to the story. One of them was really excited by the task because she loved drawing and immediately proposed to try experimenting with stop motion.

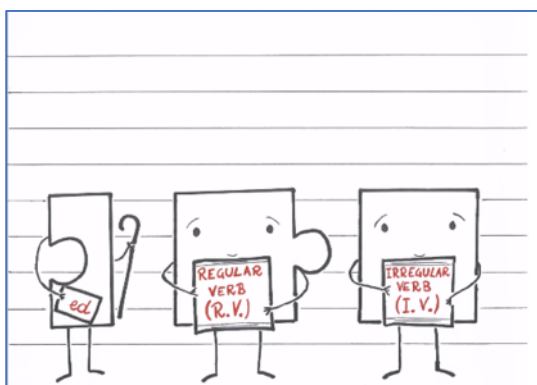


Fig.19 – Presentation of the characters

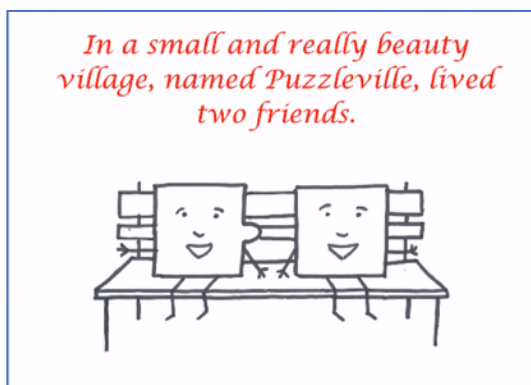


Fig.20 – Regular Verb and Irregular Verb are best friends

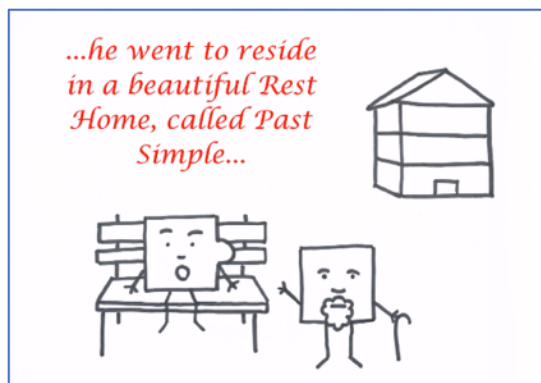


Fig.21 – Irregular Verb ages and goes live in the Past Simple house

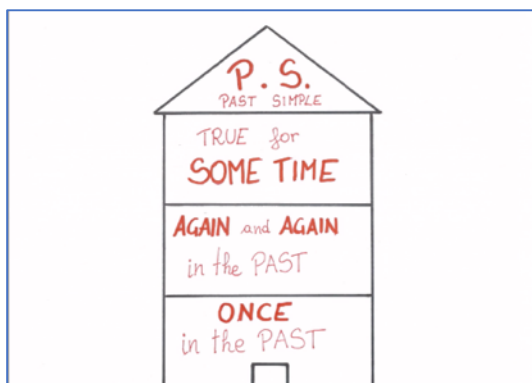


Fig.22 – The Past Simple retirement home

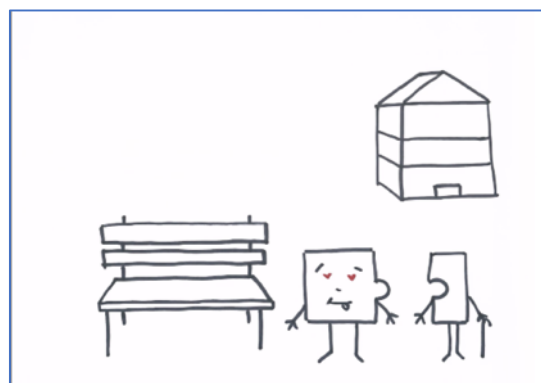


Fig.23 – Regular Verb meets -Ed and falls in love

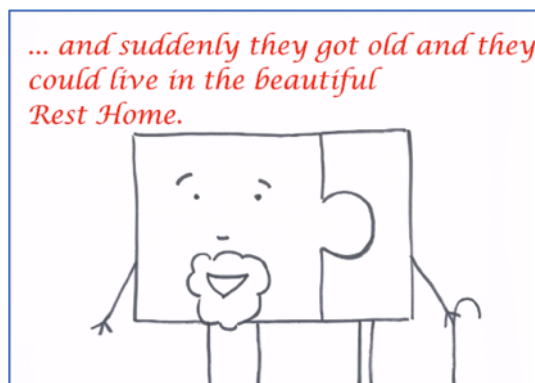


Fig.24 – When Regular Verb and -Ed combine, the verb ages

The Simple Past (The Hammer)

Rule assigned: The use of the Simple Past

Format: Video

Story: The video starts with a still shot of the objects which are going to be the characters of this story (Fig.25): a rectangular wooden block representing The Past, one of its side is tagged as The Present, and the block lays on the corner of a white sheet of paper representing The Future, over the paper there are a hammer representing the Subject and a nail representing Verb+ed.

In the opening scene we see the first three objects lying on a table, then a guy enters the scene. He finds the nail for Verb+ed on the floor and takes it to the table. He hammers it on the white sheet of paper representing The Future, but without success: the paper is too thin, and the nail falls down. He hammers it in correspondence of The Present but, again, the action is unsuccessful.

A second guy appears. He sees what the first one is doing and shakes his head, expressing disapproval (they never talk, they only mime). The second guy approaches the first one, who is still trying to hammer the nail on the paper, grabs the nail and the hammer (Fig.26), and hammers the nail on the wooden block. Then he makes a dab dance move and goes away, leaving the other guy speechless.

Notes on the group work: Some members of this group were distracted and not very engaged. This affected the final result.



Fig.25 – The visual representation elaborated by the group



Fig.26 – The second guy helps the first guy hammer the nail on the paper

The Family

Rule assigned: Formation and use of Present Perfect Continuous

Format: Video

Story: The story begins with scenes from the marriage of Have/Has (husband) and Verb+ing (wife) (Fig.27). The love that unites them is symbolized by a paper cloud with Been written on it. Then, 16

year later, we find the two are still a happy couple (Been is still between them) and had two daughters, For and Since, who are constantly fighting (Fig.28).

In the following scene we see a party is being held in their house. Three young people are dancing. They are the year 1990 (wearing a Nineties style dress), the month December (wearing a heavy jacket, a scarf and a wool hat), and the time of the day 12h[ours] (holding a sandwich in her hand to refer to lunchtime). Since and For join them on the dancefloor but while Since is well received, For is ignored and then sent away by the three dancers (Fig.29).

She goes to seat all alone on the sofa, very sad for the rejection. Then a guy sits next to her and offers her a drink. He is Two Years. He hands her a piece of paper with a love declaration, and she smiles and kisses him on the cheek (Fig.30). And they lived happily ever after.

Notes on the group work: The members of this group were all engaged and active, for the whole time. The video they produced had very good quality and was properly shot.



Fig.27 – The marriage of Have/Has (husband) and Verb+ing (wife)



Fig.28 – The whole family: Have/Has, Verb+ing, For and Since (daughters)



Fig.28 – Since dances with the times, while For is sent away



Fig.29 – For finds the time/person for her

5.3.3 Questionnaire

This section presents the data collected through the questionnaire administered to the 25 students who took part to the workshop (see Appendix 2.6 for the body of the questionnaire). It consisted of 15 questions, both open and closed, and it provided data for all three research queries.

The first goal of this research was to find out if the storification procedure could be applied by people other than its creator. To be applied it needed to be understood. Question 3 investigated this, and the results are encouraging (Table 9).

Question 3: How much did you understand of the explanation regarding ...					
	Nothing	Some things	Almost everything	Everything	I don't know
what a story is	0%	4%	28%	68%	0%
how to visualize the grammar rule (landing image)	0%	8%	48%	44%	0%
how to create a story from the landing image	0%	8%	48%	36%	8%
how to produce an illustrated text	4%	12%	36%	52%	0%
how to produce a video	0%	12%	36%	48%	8%

Table 9 – Data collected in response to Question 3 of the questionnaire submitted to the students.
Green highlights the encouraging results, yellow the ones that might be critical.

The majority of the students did not have a problem understanding what a story is, while they found the explanations on how to produce it more challenging. The parts on the storification procedure were the most difficult to understand, and raised some doubts, but this is normal considering it is an experimental technique. What is important is that only a small minority said they understood few of it and none chose “Nothing”. This means they were able to follow the explanation of the procedure but were also somehow taken aback by its novelty, as it could be expected.

The second goal of this research was to investigate the cognitive effects related to the active application of the storification procedure. The answers to questions 4 (part 1, 2 and 3, Table 10) and 8 (part 3 and 4, Table 11) of the questionnaire provided information on this.

Question 4: How much do you agree with these sentences?					
	Strongly disagree	Disagree	Don't know	Agree	Strongly agree
4.1 After this activity I have a better understanding of the grammar rule I storified	4%	0	12%	76%	8%

4.2 After this activity I remember that grammar rule better	0	8%	4%	68%	20%
4.3 After this activity I have a better comprehension of the English language	0	20%	40%	40%	0%

Table 10 - Data collected in response to Question 4 (parts 1,2,3) of the questionnaire submitted to the students.
Green highlights the encouraging results, yellow the ones that might be critical.

The majority of the students felt that, after the activity, they understood and remembered the rule they had worked on better than before.

In terms of their relationship with English, the activity was a factor of improvement for almost half of the class, which shows there is potential for impacting their feelings towards the subject but one edition of the workshop is not enough to do so.

Question 8: How much do you agree with these sentences?					
	Strongly disagree	Disagree	Don't know	Agree	Strongly agree
8.3 The product my group created makes the grammar rule easier to understand	0%	0%	16%	60%	24%
8.4 The product my group created makes the grammar rule easier to remember	0%	0%	8%	52%	40%

Table 11 - Data collected in response to Question 8 (parts 3,4) of the questionnaire submitted to the students.
Green highlights the encouraging results.

They judged their product successful in making the grammar rule easier to process for other people. These results relate to the students' perception and should be proved with testing, but they show a good level of faith in the ability of these stories to deliver linguistic content.

The rest of the questions in the questionnaire investigated the students' reactions and opinions in relation to the workshop (third research question).

Question 1 tells us that the adjective the student chose the most to describe how they felt during the first meeting was "curious" (96%), followed by "interested" (80%), and "amused" (48%). The only negative adjective to be chosen was "confused" (16%) which, as we already said, is an understandable

feeling in their situation. In fact, among the reasons they provided for their choices several mentioned it was a new experience (“It was a new experience, something I’ve never done before”), which for some translated into a completely positive experience (“It was fun and I did not expect it to be this interesting”) while for others it was a little bit disarming (“I felt curious and also confused because it was something completely new”).

Question 2 tells us that the positivity was maintained during the second meeting: the adjectives chosen for the emotional status during it were again “interested” (72%) and “amused” (68%), followed by a new entry “inspired” (60%) and again “curious” (48%). Among the reasons they provided for their picks, they said they were left with curiosity from the day before (“Knowing the project from the day before, I wanted to know more”) and were looking forward to creating their story.

It is interesting to see they chose the adjective “inspired” for the meeting including the practical lesson on how to produce their stories to be shareable products. It suggests they understood those were skills they could also use later on to express their creativity.

The “confused” people this time were the 12% (one person less than the other time) but one student also ticked “bored”. In the comment section, the one who selected both “bored” and “confused” wrote simply “No”, while one of the students who picked “confused” wrote “Still confused, and more sceptical”. On the previous day, he picked the adjectives “confused” and “inspired”, and in the comment section wrote “Innovative idea”. The third student selecting “confused” for the second meeting wrote in the comment section “Still interested, like yesterday, but today also a little bit confused by the great amount of instruction”. This same student also selected “inspired” and “interested”.

Considering these results, it does not surprise that the majority of the students said they would like to do the activity again (Question 4, Part 4, Table 12). However, they would like to be given more time (Question 4, Part 5, Table 12). In fact, all the students who answered Question 5 (which asked them to motivate their answer if they said there was not enough time) said they would have liked to have more time to write the story and create the video/illustrated story.

Question 4: How much do you agree with these sentences?					
	Strongly disagree	Disagree	Don't know	Agree	Strongly agree
4.4 I'd like to do the narrativization activity again	0	4%	12%	48%	36%
4.5 The time set for every activity was enough	8%	32%	36%	20%	4%

Table 12 - Data collected in response to Question 4 (parts 4 and 5) of the questionnaire submitted to the students.
Green highlights the encouraging results.

Despite having a short time available, in their answers to Question 6, 84% of the students said they were pleased with the videos and the illustrated stories they created, while the remaining 16% said they were happy with their product but that it could be improved. No one said s/he was unsatisfied. Question 7 tells us that they chose between video and illustrated text mainly on the basis of which format was best suited for the stories they created (48%), while some took their pick because of time or means constraints (35%). The remaining chose on the basis of their personal taste.

The decision to have the students work in groups proved to be successful. Their answers to Question 8 (parts 1 and 2) show they were able to all contribute and fairly equally (Table 13). Since this is their opinion, these results must be combined with the observations lead in class to have a “full picture”.

Question 8: How much do you agree with these sentences?					
	Strongly disagree	Disagree	Don't know	Agree	Strongly agree
8.1 All the members of my group contributed to the work	0%	4%	4%	52%	40%
8.2 The members of my group contributed equally to the work	4%	0%	16%	48%	28%

Table 13 - Data collected in response to Question 8 (parts 1 and 2) of the questionnaire submitted to the students.
Green highlights the encouraging results.

When asked to judge their classmates' products in Question 10, all the students who answered expressed positive comments: they praised the activity (“It was an emotional, collaborative and very creative work”), some praised their work (“We did great!”, “I was happy with our work and I think also the others did well”), some praised the work of others (“I really liked Puzzleville, I think it really made the rule clear”), some also self-criticized (“Watching the others' works I realised we could do

better”). This goes to prove the utility of having a moment of sharing at the end of the workshop (“It was useful to watch what the others had realised and compare it with ours”, wrote one student, and another “Watching the works of the others might help us do better next time”). Moreover, a student explicitly praised the creativity and skills showed by the class: “We all had different ideas. I was surprised to see the level of creativity we can have as a class group”.

Question 11 was an open question which asked the students which part of the workshop they liked the most and why. The majority of the students liked making the video or the illustrated story the most (72%), while the others divided between creating the story (14%) and watching the results the last day (14%). Even though making a final product to deliver the story is not an essential part of the storification procedure, it is an important part of the workshop: it constitutes the “sugar on the pill” but also engages the students with an activity which obliges them to develop their visualisation in order to put it out into the world for everyone to see.

The last question of the questionnaire, Question 12, was really a free space for comments. All the 12 students who wrote something here wrote something positive: they said that the workshop was useful, that every student should do it, that it was engaging, fun and interesting. The only critique was that more time should be devoted to providing the technical skills required for making a good product.

5.3.4 Professor’s interview

The first question the experimenter asked the professor was “Do you think this workshop has been useful? How? Would you do this activity again with your students?”.

The professor answered she would do it again, she found it to be very stimulating and would like to do it in all her classes. She thought this workshop targeted breaches in the linguistic mechanism and empowered the students because it actively engaged them in fixing the problem. Moreover, they had fun with technology, which worked not only as “bait” but also allowed them to manipulate information and translate it from one code to the other.

The professor explained that the students knew information could be delivered in different ways, and they particularly appreciate videos, but they did not know how to make them. The workshop taught them that, and that is a knowledge they can now use as they please.

This type of product is appealing to them and motivates them. She was pleasantly surprised seeing they met after school to complete the project. “They usually complain a lot, and I have to bargain with them to make them do group work at home,” she said.

She mentioned how the students told her they had fun working autonomously on the stories and producing the videos. In her opinion this tells us they like using their creativity to create something they know is going to be useful and also visible, something they can show and share with the others. She also added that she considered this workshop to be a success also because of the way the experimenter interacted with the students and presented the content: despite the wide amount of information she wanted to transmit, she was not boring but enthusiastic and energetic. The professor considered the experience to have been positive because of the intrinsic qualities of the technique as much as because of the experimenter’s attitude.

When the experimenter asked the professor if there was anything she would have liked to be done differently, all she mentioned was the time management: she would have liked for the students to have two hours instead of one during the third meeting. This would have allowed the experimenter to give them more feedback and raise their awareness regarding the new content and their new abilities.

The experimenter asked the professor a comment on the students' behaviour, considering she knows them well. She said they were surprised and somehow shocked at the beginning, because the activity that was being proposed was so unusual for them. This was a good thing, in her opinion, because they felt challenged and got excited by the dare. She also said she saw them being autonomous, self-sufficient: the experimenter gave them the instructions and they started working right away, while usually they ask many questions and occasionally complain. This time they were focused and impatient to do what they were asked to do. According to their professor, this enthusiasm was not only superficial but came from inner motivation, and that in the end is the goal of every teacher.

5.4 Data analysis and comment

In this section we analyse the data and elaborate answers to the Research Questions: in 5.4.1 we provide a discussion in relation to the application of storification procedure by people other than its creator (RQ1); in 5.4.2 we consider the cognitive effects on the students involved in the application (RQ2); in 5.4.3 we analyse the students’ reaction, in particular in relation to their emotions and behaviour (RQ3.a), their understanding of the content and evaluation of the workshop (RQ3.b), their

work as groups (RQ3.c), their opinions on the products they created (RQ3.d). Table 14 summarizes all the data sources for this field trial and pertaining research question/s.

Data source	RQ1	RQ2	RQ3.a	RQ3.b	RQ3.c	RQ3.d
Experimenter's diary						
Students' stories						
Questionnaire - Q1						
Questionnaire - Q2						
Questionnaire – Q3						
Questionnaire – Q4.1, 4.2, 4.3						
Questionnaire – Q4.4						
Questionnaire – Q4.5						
Questionnaire – Q5						
Questionnaire – Q6						
Questionnaire – Q7						
Questionnaire – Q8.1, 8.2						
Questionnaire – Q8.3, 8.4						
Questionnaire – Q9						
Questionnaire - Q10						
Questionnaire - Q11						
Questionnaire - Q12						
Professor's interview						

Table 14 – Representation of the data employed to answer each research question

5.4.1 Analysis of the students' stories to evaluate the application of the storification procedure

In order to verify if the storification procedure has been applied and how, each students' story will be evaluated on the basis of four characteristics: characterization, starting image, landing image, key action/conflict. If the characteristic is present in the story the symbol is that of a full circle, if it is just partially present a half circle, if it is not present an empty circle.

In order to be considered a successful application of the storification procedure, the story needs to feature a landing image, a starting image, and a conflict. Characterization is not considered as

fundamental, since meaning can be inferred even in its absence (for example, a linguistic element can be connoted just by the name on the shirt of the character).

The last section complements these observations with the remaining data relating to the first research question, allowing the elaboration of an answer.

Comment on “A special taxi”

The beginning of the story is a little bit confused, and the starting image is not well constructed and unclear. However, as the story progresses we understand the group of people have specific features linking them to the pronouns, proving the visualization process of the linguistic elements was understood and applied. The key action here is a mutual and exclusive selection of the pronouns He, She, It and Verb+s (Verb+s is visualized as a taxi where only those three pronouns can fit, while the others fail in getting in). The final image is that of He, She, It being the only ones getting into the “special taxi” Verb+s. It is not clear why the taxi is special, and this part could be elaborated and be more precise, but the general meaning of the grammar rule comes across.

Evaluation of the key elements:

Characterization	●
Starting image	①
Landing image	●
Key action / Conflict	①

The three key elements are present, even if not fully developed, so this story can be considered a successful application of the storification procedure.

Comment on “The soccer game”

This story looks like it is actually made of two stories. The first one relates to the use of For and Since, who here become two soccer players. The landing image, the one translating the rule, shows Since taking his rightful place in the sequence including 2001, and leading his team to success. The starting image is that of the team beginning to play, and the conflict is represented by For taking Since’s place next to 2001 and leading the team to a failure. This story tackles a small piece of information (one of the uses of Since, as opposed to For) but does so successfully.

The second story is that of Present_Simple and Present_Perfect_Continuous militating in opposing teams but being equally strong players. This part is not clear and does not appropriately translate any part of the grammar rule.

There are two main criticalities with this video. The first one is that, apart from the name on their shirts, the characters are not characterized to symbolize their linguistic element in any way. It is not even sure which team they belong to. The second one is that it is difficult to understand which character represents which linguistic element, since the names written on a paper attached to their shirts are not well visible. It takes several views to really understand what is going on in the video. This could be solved by having a short presentation of each character at the beginning of the video. This highlights the need to ask students involved in the experimentation to make their characters well identifiable.

Evaluation of the key elements:

Characterization	⊙
Starting image	First story ● Second story ○
Landing image	First story ● Second story ○
Key action / Conflict	First story ● Second story ○

The three key elements are present, at least in the first part of the video, so this story can be considered a successful application of the storification procedure. The second story is a nice attempt but unfortunately it is not understandable as it is.

Comment on “Hermit Crabs”

This story is extremely simple, nevertheless it has all the elements required by the task. The story begins with the image of the pronouns being hermit crabs looking for their shells. All the characters are present but there is something missing: all the pronouns fit in the Verb shells on the shore, except for He, She and It, for whom those shells are too small.

They embark on a journey to find a place where they can fit (the journey could be detailed a little bit more, to make it more interesting, or there could be a dialogue between the oversized hermit crabs and the ones who found their shell easily).

The story ends when the hermit crabs He, She, It find Verb+s shells, which are bigger (since the conjugated verb is longer) and can fit them.

Despite its being very simple, the story delivers all the essential elements required by the narrativization procedure: the two images were created and are clear, the characters were given

features corresponding to their linguistic elements (hermit crab He wears a tie, She a ribbon, It has no gender) and there is consistency in giving them a reason to perform their actions (they need an extra element, the verb is not enough, therefore the visual metaphor of a bigger shell).

Evaluation of the key elements:

Characterization	●
Starting image	●
Landing image	●
Key action / Conflict	●

Even if very simple, this story can be considered a successful application of the storification procedure.

Comment on “Simple Past (Puzzleville)”

They followed the instructions and created the characters first, succeeding in creating characters that visualize the linguistic elements. They decided to represent the Regular and Irregular Verbs as puzzle pieces, because they can be modified by the elements attached to them. Because they were working on the use of the Past_Simple, they created a third character for the suffix -ed, and because it is used to create the past tense of regular verbs, they visualized it as a walking stick (a common attribute of older people) and gave it the ability to combine with a verb and make it age immediately. They also visualized the Past Tense as a three storeys house, each storey representing one of the common uses of the tense. Doing this, they proved to have understood the visualization process and taken full advantage of it, using objects and places to visualize linguistic items, as it was explained.

They created the two images correctly. The starting image is that of Regular Verb and Irregular Verb sitting together on a bench and looking the same. The landing image is the one used as background of the final credits and shows the two sitting on the same bench but old, Regular Verb combined with -ed. The conflict or disruption of the story is represented by the moment when an aged Irregular Verb leaves the forever-young Regular Verb alone. Will they see each other again? Regular Verb is very sad. Then, -ed arrives and a solution is found, leading to a happy ending.

All the scenes were drawn and then animated with a simple but effective stop motion technique which gives a lot of dynamism to the whole video. It is a simple concept but very effective and well realized, with nice additions like the (maybe involuntary) reference to the movie “The usual suspects” when presenting the characters standing against a ruled wall and holding up signs with their names.

The video is well done, veined with humour and filled with creativity. Despite the grammar mistakes contained in the text, it is probably the best product of this workshop.

Evaluation of the key elements:

Characterization	●
Starting image	●
Landing image	●
Key action / Conflict	●

This story can be considered a successful application of the storification procedure.

Comment on “The Simple Past (The Hammer)”

This group approached the grammar rule in a very unique way: they focused on Verb+ed and its use only with verbal tenses related to the past. As instructed, they created a metaphorical visualization of the grammar rule. The problem is that they did not give agency to the objects they used to represent the linguistic elements, so they never became characters. In this story, the actions are performed by two guys who do not represent any linguistic element involved in the rule but are simply “two guys”. As already said, most of the members of this group were distracted and not engaged. Also, one member of this group showed to be very critical toward the activity and challenged the experimenter with questions attempting to spot weaknesses in what she was saying.

Like all teenagers, the members of this group seemed also worried about their public image: their desire to look cool is clear in the choice of having a character make a dance move called “dab” which is very popular among Italian teenagers at the moment. In fact, the scene was received with laughs during the public screening.

This video shows these students were able of a very intellectual metaphorical ability, but unfortunately it shows also sloppiness. The metaphor they created would probably be obscure for someone who did not receive a clear explanation of it (like the experimenter did during the second meeting). The experimenter encouraged the group to elaborate on that image, but they did not do it. It is a pity they did not put their potential to use for this activity: it looks like they could produce something very unique.

Evaluation of the key elements:

Characterization	●
Starting image	●
Landing image	◎

Key action / Conflict ☉

There is an image, but its elements are not characters in the story. The story is in the frame, and the visual representation of the linguistic elements are objects in it, not characters. For these reasons this story cannot be considered a successful application of the storification procedure.

Comment on “The Family”

The members of this group created the characters as instructed and found a way to visualize them. They visualized Have/Has and Verb+ing as a married couple. The love connecting them is Been, visualized as a paper shaped like a cloud. The latter is a nice idea and it is positive they decided to somehow turn an emotion into an element of the story. Unfortunately, the realization is weak: the object is not given agency, therefore cannot really be considered a character. Also, it would have been more effective if they shaped the paper into a heart, a common symbol for Love. The group explained the symbolism to the experimenter; it would have been otherwise impossible for her to understand why they decided to include the little cloud in the video.

This story can be divided in two parts. The first two scenes relate to the composition of the Present Perfect Continuous, while the second part relates to the use of For and Since. If we consider them separately, we see that the first part has the wedding of Have/Has and Verb+ing as starting scene, and their family life with daughters For and Since as landing scene. We have only two images and we do not see what happens in between, but we can guess it and from a narratological point of view this can already be considered a story.

The second part has the party as starting scene, so we have a situation where all the elements are present but are not in the correct setting. When Since and For enter the dance floor, there is a conflict which sees Since being welcomed by the three characters representing time slots, while For is rejected. This could already be a landing image, but the group decided to add more information and provide For with a time for her own, specifying its use too.

The characterization of the characters is rather weak for the two parents, but it is consistent for the two daughters (they are sisters, but do not get along and are always fighting for the same spot) and very clear and inventive for the time slots, which are strongly characterized with clothes, accessory and makeup.

It was a very good idea to have Since dance with the time slots that works with it, but there is a small inaccuracy: 12h could also work with For (ex. I have been waiting you for twelve hours).

Evaluation of the key elements:

Characterization ●

Starting image ●

Landing image ●

Key action / Conflict ●

This story (in all its parts) can be considered a successful application of the storification procedure.

The majority of the final products (5 out of 6) are renditions of the storification procedure as presented. This suggests it is productive and it can be used by people other than its creator.

The questionnaire provides us with more direct information, since the students were asked specifically about their understanding of the process, and the majority of them said they did understand it, even if some had doubts.

Therefore, it seems safe to say that yes, the storification procedure can be applied by people other than the experimenter. However, it needs improvement, as most of the stories produced by the students presented some issues.

Even though they had to face limitations due to technical problems and access to resources, as well as relying on their abilities only, some of these issues are clearly due to flaws in the procedure itself or at least in its presentation to the class. These are the problems observed:

- In many of the students' stories, characterization was weak or non-existent. Sometimes it was difficult to understand who embodied what. Instruction on how to build the characters were given (think of the linguistic item, brainstorm adjectives and verbs, pick two or three adjectives and one verb, design a character who could embody them), but no one seemed to have done this. This means this part of the process needs to be changed, maybe expanded, surely clarified, its importance highlighted.
- Also the role linguistic-elements-turned-characters come to have in the story needs to be more clear. The group of "The hammer" created a visual metaphor for the rule but did not use the elements of that metaphor as characters. It is necessary to clearly convey this instruction: the students must identify which grammar items are going to be characters and visualize them in order to give them agency. The easiest way is to anthropomorphize them. Because a scene is made not only of characters, but also objects/props and setting, these too can be used to convey meaning regarding the grammar rule.

Sharing this information with the students implies that the storification procedure as it was presented in the first trial needs to be modified to account for this improved visualization stage.

Moving on to story construction, it was noted that the students did not make use of the template the experimenter provided and which was supposed to help them respect the three-stage sequence of the storification procedure. This might mean the process was chunked too much and unnecessarily. Maybe all is needed is the story structure, and a story can be created even if its parts are ideated in a sequence different from the one provided in this workshop (landing image first, starting image second, story connecting them last).

However, considering it worked this time and that understanding of the storification procedure is fundamental, the three-stage sequence was kept for the following trials. What needed to be changed was the way it was shared: in this field trial the storification procedure complete scheme was shown at the end of the first meeting in few minutes; the non-ideal conditions of its sharing might have impacted the understanding the students had of it.

The students showed consistent enthusiasm towards the activity. This translated into strong motivation, but also haste. This can make them ignore part of the instructions. That is why instruction must be given clearly and taking time to stress their importance. Otherwise the students will just ignore them.

5.4.2 Evaluation of the cognitive effects of the active application of the procedure

The questionnaire included several questions investigating the impact of the workshop on students' linguistic abilities and competencies.

Looking at the answers to Questions 4.1 and 4.2 we can see that 84% of students agreed that after the activity they felt a better understanding of the rule, and 88% said they felt they remembered the rule better. These answers are given in auto-assessment, which means that the students are asked to say if they felt the activity was useful for their learning or not. Nevertheless, they are encouraging.

The question did say "the activity" and did not specify if it referred to the creation of the story, the production of the video, or else. It can be assumed that the students thought of the whole activity, from the grammar rule to the video. If included in future questionnaires, this question would need to be modified in order to be more precise.

Talking about the product they created, 84% of the students agreed that it made the grammar rule easier to understand (Question 8.3) and 92% that it made it easier to remember (Question 8.4).

Seven students used the following space (Question 9) to comment on their answer. Among these, one student highlighted how it is easier to remember things that are visible, and another one mentioned the characters as a big help in remembering what the grammar rule is made of. It is interesting to see

how both these comments focus on one of the two essential aspects of the process: visualization (the other being storification).

The importance of visualization has been highlighted also by the English teacher during her interview. She noted that technology played an important role in the workshop: it functioned as “bait” for the students, but it also invited them to manipulate the information. They used technology to transfer the information (the grammar rule) from one domain (text) to another (images, video). In doing so, they had to elaborate that information, they needed to understand it if they wanted to manipulate it. The video or the illustrated text they produced crystallized the result of their manipulation, made the transcodification visible to them and to the others, allowed them to go back to that information in the future. This would not be possible without technology.

Related to this, is an observation the teacher made about students’ motivation: because they knew what they were doing was useful and they judged it as cool, they were intrinsically motivated. This kind of motivation is the one allowing real and deep learning to happen, and she saw it in her students during the workshop.

The only thing she would change is the time allotted to the third meeting: she would have liked the experimenter to spend more time discussing with the students, to give them feedback, to set and define their new competencies. In fact, it is difficult to say if during the third meeting the students paid attention to the grammar rules behind the stories they were watching: their reaction in class suggests they were enjoying watching themselves and their mates on the screen, more than reflecting on the metaphorical information.

This suggests the final discussion should be extended to feature a deeper analysis of the videos. The discussion can serve both as a test (of what was produced by the authors, of what was understood by the others), and as a learning opportunity: it could be the revision moment where stories and relating concepts settle in the memory of the students.

5.4.3 Analysis of the students’ reaction and evaluation of the workshop

In order to provide an answer to the third research question, the reaction of the students who took part to the workshop will be analysed under four different perspectives: their emotions and engagement, their understanding of the content in relation to how it was communicated, their behaviour while working in groups, their evaluation of the final products.

❖ Students were engaged and experienced positive emotions

The reaction of the students was very positive: they were interested, curious, amused, inspired. They were engaged and active in class, and mostly appreciative in their answers to the questionnaire. Sometimes they were confused or had doubts, but this makes sense since the activity was innovative and new to them. In fact, several comments of the students mentioned how they enjoyed the activity because it was new and interesting, something they had never done before. As far as the few students judging it boring, it was something inevitable: the fact that not all the students enjoyed the activity in the same way is a manifestation of human nature, it would be hardly possible to have every single member of a group like the same thing.

A lower participation on part of the students was noted during the explanation of the visualization process, when they stayed silent and their faces showed neither signs of recognition nor confusion. The experimenter reiterated the concepts to be sure the students understood, but this led some of them to show impatience. This reaction cannot be ignored: the experimenter needs to provide a detailed explanation of this process, but she has to find a way to do it while keeping the students' attention.

The students proved to be very interested in the production of their story, with a preference for video making, which in fact was the favourite part of the majority of the students. They appreciated working hands-on and this confirms the importance of including the production of the story into an artefact in the workshop.

Going back to the observation in class, it should also be mentioned that their attention was proportional to their personal interests towards the topics involved. For example, the students who liked drawing were more likely to pay close attention, as did the ones whose dream is acting.

Their English teacher observed they seemed surprised at the beginning, but quickly got a grip of what was happening. She was surprised by seeing them so committed to something: they usually oppose meeting after school to complete group work; this time they did it without complaining, on the contrary they were happy about it.

These results are extremely encouraging: interest and curiosity are key factors in making an activity valuable from a cognitive point of view, and students' emotions should always be taken into account when planning a learning activity.

❖ The content was understood, but there is space for improvement

This was the first attempt at running this workshop at school. It was destined to be repeated for experimental reasons regarding the PhD project, so it was particularly important to investigate if the content had been delivered clearly and, if not, receive feedback to better it.

In their answers to the questionnaire the majority of the students said they understood the explanations of the first meeting related to the storification procedure: 96% of the students said they understood the explanation of what a story is, 92% of how to create a visualization of the grammar rule (the landing image), 84% of how to create a story starting from this image. These numbers seem to be consisted with the observations led on students' stories, the majority of whom were correct applications of the procedure. However, these data need to be intertwined with the observations in class to have a full picture.

During the first meeting the students showed to have a good understanding of key concepts of narratology, and this facilitated the transition into the following explanations. It is important to remember that their high school course focuses on literature, and that students of other schools might not have the same knowledge.

They responded very well when asked to analyse the characters representing emotions but had a harder time with the ones representing linguistic elements in "Speed Dating". However, after being prompted by the experimenter, they were able to pinpoint all the features linking linguistic elements and corresponding characters.

While the visualization process was being explained, the class was silent. It was not possible for the experimenter to understand if they were following or not. She asked them for feedback, but they did not reply. This is normal with students of this age. They do not want to be pinpointed as the "dumb" ones, therefore they often avoid saying they did not understand something.

This is one of the reasons it seems like a good idea to have them work in groups: it should allow them to exchange information among peers, encouraging the ones who did not understand to ask for clarification to fellow students. Support can come also from the experimenter: during the activity in class, the experimenter can spend time with each group, giving the students the opportunity to ask for clarification.

It can be concluded that the process works, but it needs to be better illustrated and shared, so that all the students pay attention, understand it and apply it successfully.

As far as the explanations on how to produce the stories are concerned, the students followed them with great interest, understood them (84% of the students said they understood how to create an illustrated booklet, and 80% how to create a video) and were later able to apply it. However, these numbers can and should be improved.

Talking about the third meeting, it is necessary to redesign the discussion part, in order to make it work as a final learning opportunity.

During her interview, the professor highlighted how the presentation of the material had been clear and effective. The students were very focused and engaged, because they recognized the value of the information they were receiving, and the information was delivered in such a way they found it engaging and clear.

The main complaint regarded time management: students lamented they needed more time for their product. This means the problem is with production, not understanding.

These observations must be kept in mind, and changes to the workshop need to be made accordingly.

❖ Group work was effective and enjoyable

Talking about group work, it looks like cooperation was real: the majority of the students contributed actively to their group work, even though not all in the same way, and there were differences in between the groups.

Again, it is not possible to have all people behave perfectly and fully engage in the activity. It is only human (especially at this age) to have some people slacking and relying on other people's efforts. However, according to the questionnaire the majority of the students felt the cooperation worked.

This is confirmed by the observations lead in class: the stories created by the different groups reflected the interests of its members and also their talents (for example, a girl who liked drawing involved the other members of the group into creating a stop motion video).

In her interview, their professor highlighted how they were unusually happy about meeting after school for a group project. She asked them "You met after school, how did it go?" and one of them replied "Well! We even had fun!". From this and other comments in class, she thought working on this project with other students was considered a plus.

The creative freedom implicit in the activity made possible for all students to contribute to the group work according to their abilities, all united towards the aim of creating an effective story.

In fact, the class exhibited an excellent behaviour during the third meeting: all stories were applauded, and all students showed to be very supportive of each other.

There were two obstacles to group work. One was the non-homogeneity of the grammar rules assigned: two were easier than the others, which meant two groups tended to always finish before the others. The other was the lack of appropriate tools in class: several students wasted time while trying to figure out a way to create the images they needed with Microsoft Paint, and ended up giving up.

❖ The students were happy about their products and appreciative of the work of the others

Students were also asked to evaluate the products their group created, and the ones created by the other groups.

During the discussion held on the third meeting the students did not express opinions, maybe because they were shy or did not want to hurt each other's feelings. However, they proved to be very supportive of each other. All stories were applauded, and some even praised aloud.

In the questionnaire 84% of the students said to be completely satisfied with what they created while the remaining 16% were satisfied but thought there were some things that needed adjustment.

They showed independency and ability to self-manage deciding which product to create among the two options basing on how much time they had, which format suited the story the best, the abilities of the group members, the material at their disposal.

When asked in the questionnaire to say what they thought while they were watching the products, all of the comments were positive. One student even wrote s/he was amazed by the unexpected extent of creativity displayed by the class members.

Only one comment was negative: one student said s/he thought their product was the worst and wished to have done it better. It is a negative comment because it expresses dissatisfaction, but it is not really negative from an experimentation point of view because it implies the student felt inspired to do better.

5.5 Conclusion

The first field trial offered a positive feedback on the storification procedure and the workshop designed to teach it. It was proved to be applicable by people other than its creator, and with positive effects for the active learners: increased understanding and memory, acquisition of new creative skills, fostering of the ability of working in group.

The experience also provided some insight on how to improve both the workshop and the procedure:

1) Stressing the importance of characterization

The difficulty in the identification of the characters in some of the students' videos highlighted the need of asking future students to make their characters well identifiable. It needs to be clear not only who is who in the video, but also who is what. Characters need to be visual metaphors of the linguistic items, otherwise part of the meaning is lost, and an opportunity of conveying information is missed.

This implies a modification of the storification procedure itself (specifically, the way the two images are built), as well as a redesign of the way it is communicated to the students. It is fundamental the students understand that the grammar rule and its elements have to become the characters, the props, the setting of their stories.

Also, it must be stressed that the characters they create need to have agency in order to be characters in a story. In this first trial, several groups used objects to represent linguistic elements, without granting them agency. This can be done, but they cannot be the protagonists of the story: they are props. The level of importance of the elements must be decided before writing the story, and their agency decided accordingly.

2) Stepping stones

The storification procedure starts from the end of the story and works backwards. This might be difficult to understand for the students, and this might be the reason behind some of the mistakes they made while creating their stories. It is necessary to find a way to keep their attention even though the explanation of the process is divided in small chunks.

3) Final discussion as learning opportunity

The final discussion needs to be designed in order to be an opportunity to cement the grammar content in the students' knowledge.

4) More time for production

In general, it is necessary to rethink the time slots and allow the students more time for the realization of their product.

This can mean more time with the experimenter, in class or during afternoon hours, but it can also mean more time in between one meeting and the other.

The second option looks more sensible for two reasons. First, it might be difficult to get more time at school (every workshop hour is subtracted to normal teaching, and teachers are in a constant battle against the clock to complete the program). Second, when they are at school, students have limited access to the tools they need to produce their stories (phone, computer, ...).

5) Video only

The idea of offering options for the story's format is valid and to be kept. However, the idea of the illustrated text proved to be weak, for three main reasons. First, its realization is less complicated than

the realization of a video, which means it needs less instruction and less time to be completed. This leads to a disparity between groups that should be avoided. Second, it requires more text than visualization, not expanding on the latter which is a fundamental part of the process and very important from a cognitive point of view. Finally, it is not clear where this text is to be published. It remains something abstract and floating in the air.

For all these reasons this option should be eliminated and substituted with the option of creating a video with drawings and texts and/or a video with animated drawings. This way the students who are shy and do not want to appear on camera will not be stressed by the activity, and the ones who like drawing will find something inspiring for them.

Moreover, the final products will all have the same format. There will be consistency among them, allowing to frame them all in the same context if needed (for example, a YouTube channel created by the class, or a web page on the school website).

Having the only option of producing a video will allow the experimenter to devote more time to illustrating the software. This will speed up operations for the students and allow them to achieve a better result.

Lastly, video making is a cool and interesting activity for students. It is the perfect “bait”, but at the same time forces them to manipulate and understand the information given. It triggers their intrinsic motivation because they want to learn how to make a video, and the learning content is the material they work on. They know it is a useful activity, but have fun engaging in it, and they enjoy sharing the result. They gain abilities they will be able to employ again.

Chapter 6.

EXPERIMENT B: Grammar Stories WORKSHOP

Experiment B was developed to test if the experience gained from the pilot experimentation could lead to improve the procedure and its application.

On the basis of the first trial, the procedure underwent some changes, impacting also the workshop (they are described in 6.1).

Experiment B had aims similar to those of the first trial, but it involved different schools and age groups, in order to also evaluate if age and previous knowledge can influence the procedure's application.

The Research Questions guiding this experiment were:

1. How do students and teachers react to the workshop? What is their opinion about it?
2. Does the workshop (and the application of the storification procedure in particular) facilitate the understanding and remembering of English grammar rules? How?
3. What kinds of stories were produced by the students? How can this experience inform future users of the storification procedure?

A complete description of the experiment is provided in Section 6.2. The data collected are presented in Section 6.3 and analysed in Section 6.4. Section 6.5 draws some conclusions.

6.1 Changes to the storification procedure

After the first trial experiment, the storification procedure was updated with five main changes: the addition of a “moral” of the story to be identified as first step (6.1.1); the option of transforming the elements of the rule not only in characters, but also in props and settings (6.1.2); new instructions guiding the brainstorming (6.1.3); the exclusion of the common mistake, with a consequent change of the nature of the conflict (6.1.4); the choice of the term “scene” instead of “image” and a new screenplay template (6.1.5). These changes lead to a simplified version of the procedure (6.1.6).

They were in part the result of the observation lead in the first field trial, in part adjustments that followed those modifications. They all aimed at making the storification procedure better: a more

efficient, easier, more comprehensible tool to create stories out of abstract concepts. The version described here was the one that was presented to the students and tested in this experiment.

6.1.1 Clarifying the message: the moral

All stories that are “educational” carry a message: it can be explicit or not, but it underlies and guides the narrative. The Grammar Stories are meant to be teaching tools: they aim to deliver a message, not only to entertain. This message can be called a “moral”, loaning a well-known term from the fairy tales, and it corresponds to a sentence. For example, the moral of the Grammar Story “Speed Dating” can correspond to the following sentence: “Verb+s matches only with She, He, It”. For “To Be Forever Alone”, the moral can be: “[To form the Present Perfect] The Past Participle combines only with the auxiliary To Have, and not with To Be”.

In the updated version of the storification procedure, the first step consists in identifying the moral and encoding it in one sentence. This should simplify the task of “storifying” an abstract concept by providing students with a landmark, a reference point: while applying the procedure, they are constantly guided by the thought of the information they need to deliver, they can always go back to it and check if the steps they are taking are leading them in the right direction. Moreover, it helps them narrow the information and focus on one part or a specific aspect of the grammar rule. In the first field trial, some of the students were thrown off by the amount of information they needed to deliver, and the experimenter suggested them to focus on one part only. They did, but without reformulating the rule: they simply selected a portion of the rule; this helped them but did not avoid the risk of confusion. It would have been necessary for them to clarify to themselves the *meaning*, what they wanted to say with their stories.

It is interesting to note that the first of the “Seven Steps of Digital Storytelling” (Lambert, 2010) has students asking themselves questions such as: “What’s the story you want to tell? What does your story mean? What’s the story really about?” The two processes are different (Digital Stories usually revolve around episodes of personal life, while the Grammar Stories translate abstract concepts), but it is interesting to see this correspondence, and it is consistent with Bruner’s idea of every actual text being the base layer of a virtual text carrying a deeper meaning, a message for the reader or listener.

6.1.2 Abstract elements can become characters, props, settings

A scene is not made of characters only, but also settings and props. These can have metaphorical meaning and play a role in the storified version of the grammar rule.

Examples of this were found in the videos produced by the students of the first field trial (in one story the three uses of the Past Tense were represented by the three storeys of the homonymous house), and in “The Comma Story” (where the long subordinates are tangible and very heavy strings of words that the conjugations have to lift with their arms). Therefore, in the updated version of the storification procedure, instead of only characters, the elements can be transformed also in props and settings. Settings are locations, the visual context of the action. Props are objects with which the characters interact and/or have a part in the story.

Settings and props are not essential for the stories (while characters are), but they are useful. They can enrich the meaning or help frame it. For example, they can clarify which verbal tense we are talking about: if changes could be made, in the Grammar Story “To Be Forever Alone” there could be a shot showing that the name of the square is Present Perfect (setting); this would deliver an information that was judged missing by the viewers of that story, and without wasting time or lengthening the video. In one of the students’ stories of the experimentation titled “The -ing race” the ending “-ing” is the medal the racers (representing the Time Prepositions) get when they run the correct road (Verb without subject) and get to the finish line.

Characters remain the most important elements, and they are essential because they have agency, they are the ones making things *happen*. Therefore, in the storification process, they must be present, and they must be granted agency. The easiest way to do so is by anthropomorphising the elements of the information.

It is important to identify the correct hierarchy of the elements in the rule and transform them accordingly: the characters should correspond to the main elements in the rule, contextual but important information can be delivered as props or settings.

6.1.3 New questions guiding the brainstorming for characterization

One of the main obstacles for the students in the first field trial was to characterize the characters in the story. This is an essential element to make the story effective, nonetheless it is also one of the most difficult. The experimenter herself faced its complexity creating the six original Grammar Stories.

To help the students in this respect, it was considered to create a template to fill in, apt to guide them through the process, but this idea was then discarded because a template would force them to work on each element individually, hence possibly losing the general perspective they needed to build characters congruent with each other in the story.

Therefore, it was decided to leave them free to explore, instead of forcing them into a pre-designed path, and guide them with simple instructions, including a set of new brainstorming questions.

6.1.4 Conflict, but no common mistake

It was decided not to ask the students to include the common mistake associated with the rule in their story, for two reasons.

First, even though they were provided with pairs of grammar rule-common mistakes, the students in the first field trial did not include the mistakes in their stories: they created conflicts not among the rule and the mistake, but rather among elements of the rule being misplaced or struggling to fit in and the ones in place.

Second, before starting the workshop the teachers were asked what difficulties their students were encountering so that they could be addressed with the storification process. They provided lists of topics and rules, but not common mistakes, because of the diversified situation of every class group. Including the common mistake in the story might be important when addressing adults (as we have seen in Chapter 5), but might be confusing for students, because it introduces a “wrong” element that might or might not be part of a mistake they make. The risk is to have students memorizing the rule with the wrong element.

It was therefore judged preferable to focus completely on the rule. The conflict would still be part of the storification process, if one wanted, but it would spark among the elements of the rule. This would also avoid the additional process of creating characters for the mistake.

6.1.5 “Scene” instead of “image”, and a new screenplay template

The students in the first field trial struggled with the concept of “mental images”: even if they were asked to create still images, what they did was thinking in terms of scenes. Therefore, it was decided to implement this and talk about “ending” and “beginning” *scene*. The concept of “scene” is more familiar for the students and should help them in the task.

Consequently, it was also decided to introduce the use of a new screenplay template that included a space to draw the scene (storyboard). This would oblige the students who were working together to visualise the story they were creating and to agree on its landmarks. It would also help them to form a general idea of the story.

6.1.6 A simplified scheme of the storification procedure

All these changes were integrated in a new scheme. There are no longer two possible beginnings (rule only, and integrating mistakes) but only one, with the suggestion of a conflict in the middle.

Since the possibilities are endless, depending on the grammar rule chosen (as seen during the first exploratory trial), it was decided to give the students general instruction for the beginning, the same provided for the first version (beginning with grammar rule only): at the beginning the characters do not know each other and/or are not in the correct order. Then is up to the creativity of the students to build a story to get to the ending they envisaged (defining the ending scene is still the starting point of the procedure).

In a sense, the procedure provides prompts to carry out a sequence of steps, rather than strict instructions for story creation. This choice was made to allow for a good range of adaptability to the different grammar rules, while at the same time still guiding the users.

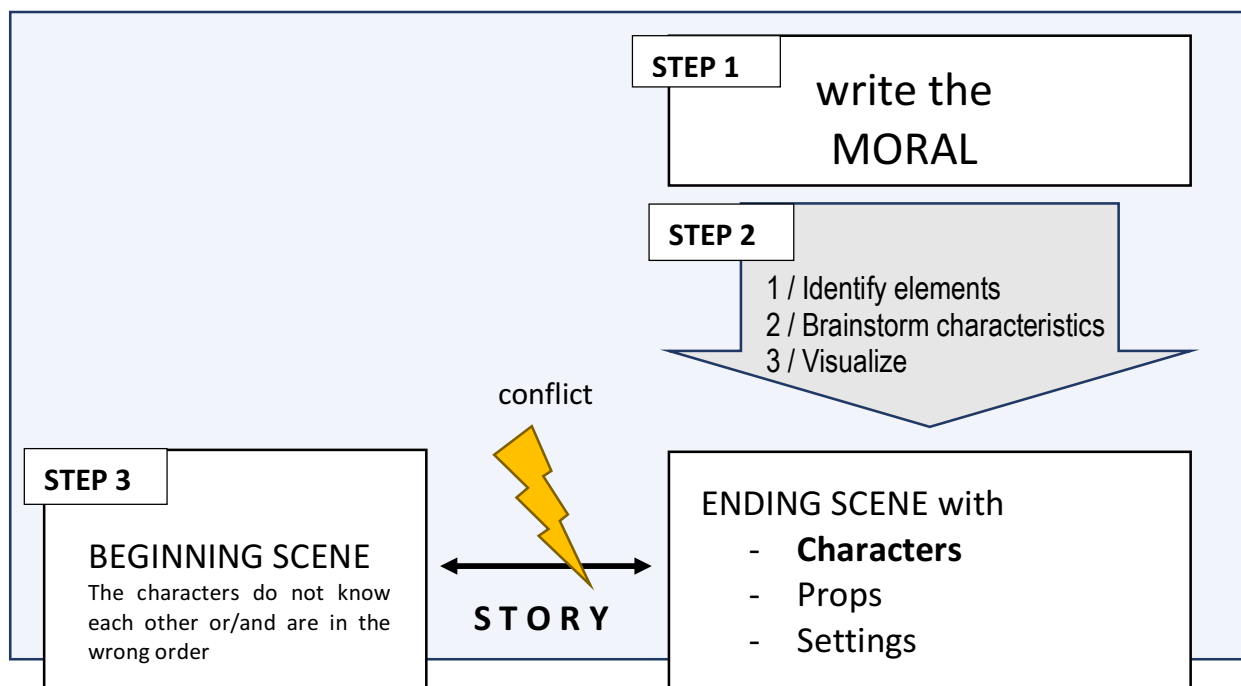


Fig.30 – Visual representation of the second and improved version of the storification procedure

6.2 Description of the experiment

Experiment B was led in four classes of three different schools: one class of 23 sophomores (15/16 years old) at a Liceo Classico (Humanistic high school); one class of 24 students in their third year of middle school (13/14 years old); two classes of 27 sophomores each at a Istituto Tecnico Commerciale⁴⁵ (technical high school) that will be mentioned as Class A and Class B. In total, 101 students and 3 English teachers took part in this experiment.

The experiment was carried out as a workshop consisting of three meetings: the first and the second were designed to last two hours, and the third one hour. At the Liceo Classico, it consisted of five separate one-hour meetings, to fit in the teacher's timetable.

The meetings at the Liceo Classico were held on October 5, 6, 12, 19, and November 2, 2017; those in the middle-school on October 13, 20, and November 3, 2017; those at the Istituto Tecnico Commerciale on October 14, 21, and November 4, 2017.

They took place in classrooms provided with a video projector. This time (differently from the first field trial), students were not required to use any technical equipment in class.

Some other differences that need to be mentioned:

- Part of the grammatical rules the Liceo Classico's students worked on were chosen by their teacher and part by them, while, in the other schools, all students were free to choose from their book the topic they wanted to work on, with support from their teacher and the experimenter.
- It was decided to let the students select the target information from their book because that is the material they will use if, in the future, they will decide to work with the procedure again. Moreover, it is a material they are familiar with. The risk of groups having uneven content (one group choosing a lengthy, rich rule, and another one choosing a simple one) was avoided by requesting them to define a one-sentence moral for the story.
- In the middle-school the teacher considered the workshop as part of her program and students knew she was going to give them a mark for it. Moreover, she decided the groups, mixing high-achieving students with weaker ones.

In the following sections we describe the meetings as they were planned⁴⁶.

⁴⁵ The name of the schools is not mentioned to protect the privacy of the participants. However, the experimenter can be contacted for further information.

⁴⁶ The slides for these meetings were the same used for the first field trial, with some rearrangements (that can be inferred by the descriptions provided) and, obviously, with the adaptations following the new version of the storification procedure.

❖ First meeting

The first meeting is very similar to that of the first exploratory trial, yet with some significant differences. It starts with the experimenter introducing herself and explaining what the workshop is for but avoiding unnecessary details. The video “Speed Dating” is shown to provide a first example of what they are going to do. Then the students are actively involved right away: they are asked to divide into groups, decide the rule they want to work on, and write their “moral” (Step 1).

After they have done this, they are involved in the explanation about the story and characters. Then, they are shown a text, explaining how to use the Oxford Comma, and straight after the video “The Comma Story”. The experimenter highlights how the two deliver the same message but in a very different way and leads the students through the analysis of the video. Together, they identify characters, props and settings. Characters are highlighted as essential. Then, they do the same with “Speed Dating”.

After watching some examples, the students are asked to transform their moral into a scene (Step 2). Then the experimenter explains some basic concepts of narratology (but spends less time on these than in the first field trial) and focuses on the need to have two events to make a story.

The experimenter tells the students the scene they created will be the ending one and asks them to create the story that leads there. The prompt is given (the elements do not know each other or are not in the correct order, something is wrong) and the presence of a conflict is suggested, but not mandatory.

The remaining time is devoted to group work and gives the experimenter the opportunity to talk with each group.

❖ Second meeting

The students should have their story ready by the second meeting, which is focused on video production. It starts with the explanation of the new screenplay template. Students are asked to have a characters’ presentation at the beginning of their video, and a last screen with the textual version of their moral. Because each story makes use of different metaphors, these elements will clarify the message of the video, and allow for a full understanding of it.

Then, the experimenter describes the software they can use to create digital images and film. The technical information provided is the same as the first experiment, but with the addition of four apps students can use on mobile to shoot and edit videos (WeVideo, FilmoraGo, VivaVideo, YouTube

Capture), avoiding the use of computer and of more sophisticated software (something students struggled with in the previous workshop).

Once again, the remaining time is devoted to group work. The students are asked to produce the videos at home autonomously and bring them to class.

❖ Third meeting

During the third meeting the videos produced by the students are shown and discussed in class. Each video is presented by its group, who is also asked to give it a title, and then shown twice: the first time just to be enjoyed, and the second time with the experimenter retelling the story over it and commenting it. After the screening, each video is discussed with the students to identify its strengths and weaknesses. After this, the students are asked to fill a questionnaire, and the teacher sits for an interview with the experimenter.

6.3 Data collected

As with the first exploratory trial, four types of data were collected: the experimenter's diary (6.3.1), the stories created by the students (6.3.2), the answers to a questionnaire administered to the students (6.3.3), and the individual interviews to the three English teachers involved (6.3.4).

6.3.1 Experimenter's diary

Liceo Classico

❖ First meeting

During the first meeting, the class was cooperative and engaged: they listened attentively to the explanations, answered to the experimenter's questions without too much prompting, were efficient in dividing into groups and following the instructions. This was very much due to the positive climate of student-instructor cooperation established by their teacher, who also showed a positive attitude towards the activity during the whole time. This seemed to reassure those students who were puzzled by the novelty of the task.

While the students were deciding the information they wanted to work on, the experimenter had the time to go talk with each of the groups. Some of the groups had doubts and it was necessary to repeat

the instructions. The experimenter also insisted that they chose something they struggled with; this was easy for some, more difficult for others. Some selected big pieces of information, and the experimenter insisted they wrote and settled on one sentence. This proved to help them focus and balanced the material between the different groups. Writing the moral required ten minutes.

During the explanation of what is a story, they were fast in pinpointing the two main elements, characters and events. Also analysing the Rage's characters was fast and easy.

After discussing "The Comma Story" and talking about the characters, it was difficult to tell from their expression what they were thinking about.

During the explanation of the second step of the procedure, they were all paying attention, many took notes. Three students looked enthusiastic when they were told it was time for them to invent stories. The last minutes of the first meeting they were free to work in groups and started creating the ending scene. The experimenter explained again to all the class that they had to create a story-version of the rule, not simply to contextualize it. Then, she spent the remaining time working individually with each group.

❖ Second meeting

At the beginning of the meeting, four groups had their ending scenes ready, while two were still working on it.

They listened to the following explanations in silence and with attention, sometimes commenting with the experimenter. After seeing the complete scheme of the procedure, a technical problem made it impossible to show "Present Sisters" as example, so the students were let free to work in groups on creating their stories. All students were actively engaged in the group work, with very few exceptions.

❖ Third meeting

The meeting was divided in two parts. During the first, the students received the screenplay template and all the instruction related to video making. They followed the explanation quietly, paying attention. During the second part, they were let free to continue the group work.

❖ Fourth meeting

This meeting was completely devoted to group work and gave the experimenter the opportunity to spend some time with each group of students.

❖ Fifth (and last) meeting

The last meeting was dedicated to the screening and discussion of the videos⁴⁷. Unfortunately, that of Group 2 was not available (they said they had made the video, but the flash-drive they gave the experimenter was empty).

Middle-school

❖ First meeting

After the initial introduction and presentation of the workshop, the students were shown “Speed Dating”. When they were told they were going to realize a video themselves, they started chatting noisily and had to be reprimanded.

They were given instruction on how to perform the first step of the storification procedure and were divided into groups decided by their teacher.

Even if helped by the experimenter and their teacher, it took them twenty minutes to settle on the information they wanted to work on and write the morals. They tended to get distracted more than the older students in the other experimental groups and needed to be called to order more often. Nonetheless, they were able to complete the task.

During the explanation on story and characters, they were actively engaged and answered the experimenter’s questions, sometimes spontaneously, sometimes after being requested to do so. They were able (with some help) to identify the defining characteristics of stories, and to analyse the character of Rage. Extra explanations were provided to help them understand “The Comma Story”, since their level of English was not sufficient to understand the voiceover or the subtitles.

They followed everything, but during the explanation of characters, props and settings in “Speed dating” they looked a little bored or confused. They liven up when they were given the instruction to perform the second step of the procedure, and understood it was their moment again. They were asked to work on it in groups. The experimenter went to talk with them, so they were able to ask questions if they had doubts.

The experimenter was surprised to see that ideas came easy to them, something the older students had struggled with. After fifteen minutes all groups had found their image, and only one was still struggling (Group 2).

They listened attentively to the following explanation, and looked intrigued to know there was a third step and that they were building a story starting from the ending.

⁴⁷ All the students’ videos are described in Section 6.3.2

The last part of the meeting was again devoted to group work. While going from one group to the other, the experimenter realized most of the groups had already thought of a story and were refining it. It is true they showed a tendency of rushing through the assignment, but at the same time it was evident they were less self-conscious than the older students, and more confident with using their imagination.

❖ Second meeting

At the beginning of the meeting, the students were told it would be devoted to providing them with all the information to make a video, and the news got them excited: they started talking and it took a lecture both from the experimenter and their teacher to bring them back on track.

However, after this, they followed the explanation quietly and attentively. They looked impressed by the quantity of information they were receiving.

The rest of the time was devoted to group work, and the experimenter had the chance to spend some time tutoring each of the groups.

By the end of the meeting, only Group 3 was still struggling with defining their images and story. Group 2 had decided to abandon the first story they thought of and invented a new one which worked, so they started thinking of the production of the video. Group 5 were well into planning the production of their story. Group 1 and 4 had effective images but needed to work more on the story.

❖ Third meeting

The experimenter started with a recap in English, because it was requested by the teacher. The students followed, silent. After this, she switched back to Italian and explained how the screening would go. The teacher handed out an evaluation template she designed⁴⁸ and that she wanted to use to grade them on the activity. After each video, the students were given some time to fill it. Unfortunately, this often resulted in chit-chatting and people getting distracted, which required the experimenter and the teacher to intervene and ask for silence and collaboration.

The students tended to get distracted after each video, commenting among themselves. It was necessary to reprimand them for their lack of mutual respect many times, and this slowed down the activity considerably. It also made difficult for the experimenter and the students who were paying attention to have a fruitful discussion.

⁴⁸ It was not included in the data for the experiment, since it was designed for a different goal.

Two other elements should also be mentioned: first, because of a technical problem, the audio of the video was absent; second, during the second screening of each video, the experimenter would add her narration/explanation of it, also involving the students in the “codification” to keep their attention.

Istituto Tecnico Commerciale, Class A

❖ First meeting

After the initial presentation, they watched “Speed Dating” in silence and followed attentively the explanation of the first step. They needed some encouragement to answer the experimenter’s questions related to English.

After the explanation on how to perform the first step of the procedure, they were given time to divide into groups, decide the target information, and write the moral. In all the groups the students picked at least two rules and started discussing which one to choose. Many of them talked passionately about their rule, trying to convince the others that theirs was better material. They got distracted here and there, but they mainly stayed on track.

They were reluctant to write down the moral, saying they “knew the rule”, but the experimenter insisted because she knew it was fundamental to guide them through the following steps. They had some doubts and they needed help in defining the information. Because of this, it took them fifteen minutes to write the morals (a little more than average).

The experimenter provided the explanation on story, characters, props, settings. In this phase, the students were active and engaged. They answered the experimenter’s questions without prompting, but it was sometimes difficult to get their attention: they often got distracted, commented and discussed among them in a loud voice and all together, making it sometimes very difficult for the experimenter to go on and forcing her to stop quite often.

The students were then given twenty minutes to apply the instructions received, while the experimenter spent some time with each group. After this, she gave the instructions for the third step, and the remaining time was devoted to its application.

❖ Second meeting

The explanation on video making was sometimes interrupted because of people chatting or getting distracted, but it generally went as planned. Some people looked bored or distracted, but the majority were engaged and interested in the topic.

The rest of the meeting was dedicated to group work, and the experimenter was able to interact with the students extensively.

❖ Third meeting

The excitement of seeing themselves and their classmates on screen made this class particularly challenging in terms of maintaining discipline: the students would comment loudly, chat with each other, and ignore the requests of the experimenter, who had to ask for their collaboration several times during the meeting. However, they were enthusiastic and proud of their products. Despite mixed results, all the students seemed confident about their rule: when before or after each screening the experimenter asked them to explain their story, they all did it and with enthusiasm (except for the last group).

Istituto Tecnico Commerciale, Class B

❖ First meeting

The meeting started with the English teacher scolding the students because of their behaviour during the precedent class. This seemed to impact them, and they remained silent during the first part of the class. They looked unwilling to answer the experimenter's questions, and she had to encourage them. The division into groups was slightly chaotic and took some time. When they were finally working on applying Step 1 of the procedure, they started discussing on which rule to choose in a similar way to that of their classmates in Class A. With them too it was necessary to insist they wrote down a moral, since they tended to simply copy the scheme in the book.

During the following explanation, they were mostly paying attention, even if not always silent. They did not know the meaning of the word "anthropomorphized" and it was necessary to explain it. While the experimenter was introducing "The comma story", the school bell announced the break. Most of the students stayed seated, looking at the experimenter. One student raised his hand and said the bell rang, so another one said "Well, whatever...". The noise exploded in the corridor outside the door and the students made the obvious choice: they started standing and leaving the room for their break. That moment of uncertainty, however, seemed to indicate a good level of engagement of the students with the task.

After the break, the explanation resumed. The majority paid attention, some chit-chatting here and there. After the second step of the procedure was explained, the experimenter wanted to spend some time tutoring each group but managed to talk only with two (the break had stolen precious minutes

to the class). At the end of the meeting she rushed to explain the third step of the procedure and asked the students to finish the story at home.

In both this and Class A the students kept on worrying about how they were going to shoot the scenes they were planning. The experimenter reassured them, telling them that cinema tricks can do magic.

❖ Second meeting

Similarly, to what happened in Class A, the students followed the explanation with interest. In this class the level of distraction was higher, and it took more effort to maintain the students' cooperation compared to the fellow class. During the group work, the level of noise was sometimes so high it was difficult to have a conversation, and it was necessary to repeatedly ask for silence. However, the students seemed receptive and most of them were pro-active when it came to working in groups. The experimenter spent the rest of the time tutoring the groups and helping them in the task.

❖ Third meeting

The screening took place as planned, and without too many interruptions. Compared to the fellow Class A, it was easier to maintain the students' attention and they were more cooperative (even though it was necessary to ask for silence on several occasions). Like in the other class, they all seemed very proud in presenting their video and confident about the rule they had been working on. One group (Group 2) did not turn in their video because, they said, they could not manage to meet to make it. Nonetheless, one member of this group was the most critical towards the other students' work and commented on each of them.

6.3.2 Students' stories

This section is devoted to the description of the stories produced by the students. It takes into account both the actual product and the information provided by the students in the first section of the questionnaire. It also reports on the process of production and how the video was received by the classmates basing on the experimenter's observations lead in class. The analysis of these stories can be found in Section 6.4.3.

01.

Title: *Music Contest*

Format: Video story (filmed clips + text)

Authors: Liceo Classico, Group 1

Moral: When using the verb “stop” followed by another verb, these two sequences are correct: Stop + To + Verb and Stop + Verb -ing.

Story: Several musicians take part to a Music Contest. They try different line ups: first walk on stage To, Stop, and Verb, but they perform badly; second, To, Ing and Verb who arrives late angering Ing who leaves the stage; third, Stop, Verb, and Ing which play beautifully (Fig.31) and are applauded; fourth, Stop, Ing and Verb, which are not very good at playing together and are booed offstage; lastly, Stop, To, and Verb, (Fig.32) whose performance is applauded. The third and the fifth line up are proclaimed the winners of the contest.

Concept and production: The students of this group were receptive and engaged, all actively involved in the work. They had the idea in class, while reasoning on the best way to frame the image they created of the two sequences of words.

At the second meeting, they presented to the experimenter the image they had drawn: a clever and effective visualization of the two uses of the verb “Stop” (combined with “-ing” and with “to”); the characters were well thought out, and the experimenter encouraged them to think of a story.

At the third meeting, they had already thought of the story and drawn some images; the experimenter gave them some suggestions and they started working on the screen play.

During the fourth meeting, the group was well into the planning, their screenplay partially filled. They discussed some details with the experimenter and received suggestions in particular on how to characterize the characters and make them recognizable: the experimenter encouraged them to opt for absurd choices if needed, like shaping one of the characters like a hexagon as in their screenplay they represented the verb “Stop” as a Stop sign.

They met outside school twice: one to discuss the story, plan the production and realize the props, and the second to film it. They organized so that each of them took care of one piece of the preparation process.

Discussion in class: It was the fifth (and last) video to be screened. It was appreciated by the students, who complimented it aloud.



Fig.31 - Stop, Verb, and Ing play beautifully and win



Fig.32 - Stop, To, and Verb give a great performance and win too

02.

Title: *Super -ing*

Format: //

Authors: Liceo Classico, Group 2

Moral: Preference verbs need to be followed by the -ing form of the verb.

Story: A family of ducks (representing the Preference Verbs) needs to cross the turbulent waters of a river, but the bridge (Verb) is damaged. A superhero called “Super -ing” (the ending “-ing” obviously) comes to their rescue: he fixes the bridge so that they can get to the other side.

Concept and production: These students chose a complicated rule, and during the first meeting they needed some help to refine it. While discussing on how to represent the elements, one of the members of the group was doodling and drew the preference verbs as ducks in line. They got the idea from there.

During the second meeting, they engaged in an animated discussion: their story was almost done, and worked, and all the experimenter had to do was help them perfection it. During the third meeting, the experimenter did not have the opportunity to check on them.

During the fourth meeting, the members of this group looked distracted and spent some time roaming the room and chatting. When the experimenter had the opportunity to talk with them, she stressed the importance of the screenplay and of planning the production of the video. They nodded enthusiastically but kept getting distracted after the experimenter left them to talk with the other groups.

In the questionnaire, they said they met once outside school to create the drawings for the story, record the voiceover and edit the video. Unfortunately, they did not turn in the video, neither during class nor later via email as requested by the experimenter.

03.

Title: *A few moments later*

Format: Video story (pictures + text)

Authors: Liceo Classico, Group 3

Moral: Present Continuous can be used for planned future actions, while “to be going to...” for intentions regarding the future.

Story: Through a series of pictures and texts, we see a character (a girl) growing up and changing: when she was little, she was a dreamer and used to say that she was going to be an astronaut. Growing

up, she changes her mind, and becomes an organized young woman who knows how to plan her future.

Concept and production: At the beginning this group wanted to work on relative pronouns. By the end of the first meeting, they had written the moral, identified “whose” and the relation of possession as the elements to be characterized, and brainstormed with the experimenter on how to show “possession”. During the second meeting they thought of comparing the elements related to the use of “whose” to a spacecraft, and the experimenter had them note there is a set sequence in which the elements must appear, so they thought of a train with wagons; they started elaborating on that.

At the third meeting, they presented to the experimenter the story they finally managed to create; they were working on the relatives “which”, “who”, “whose” and created a simple story of a boy performing some actions and using those words. Reluctantly, the experimenter had to tell them it was not a correct application of the instruction, because it contextualized but not “storified” the rule. The students were disappointed. The experimenter tried to console them. They commented it was easy for her because she was very creative, but they were not. She gave them some suggestions and encouraged them to try again.

At the fourth meeting, they were stuck, and could not think of a way to visualize their rule. After further unsuccessful attempts, the experimenter told them they could pick another rule and start over, if they wanted to. They were relieved and happy to do so.

Even if they experienced disappointment, they did not give up and, after picking another rule (present continuous as future tense), they managed to apply the process, write a story and start planning the video with new-found enthusiasm.

They liked the idea of showing a character changing in time but did not know how to do it. They said using the pictures was their “last chance”. They met once outside school to edit the video.

Discussion in class: It was the third video screened. Like the others, it was applauded, but the only comment was that the explanation at the end should have been shown longer. The experimenter highlighted that both this and Group 5’s video exemplified the use of the rule but did not really transform it into a story. The majority of the students nodded, but some looked perplexed.

04.

Title: *The -ing race*

Format: Video story (filmed clips + text)

Authors: Liceo Classico, Group 4

Moral: After time prepositions, verbs must be in the -ing form.

Story: Three Time_Prepositions take part in the “How to use the -ing form” Race. They are running on Subject Street, when they must stop because the road is blocked by a pile of stones (representing the verb in its base form). They change their itinerary and head for No Subject Street, where they encounter no obstacles. When they finally cross the finish line, each of them is awarded a “-ing form” medal (Fig.33).

Concept and production: The members of Group 4 were “struck by lightning”, and by the end of the first meeting they had already thought of an image, and were working on that. They had the idea of a car race first and maintained it up until the fourth meeting, when they decided to substitute the racing cars with runners, so that they could act in the video and make the production easier. They had also thought of some clever characterization of the characters. Unfortunately, a lack of means would later force them to cut them out (it would have required more people than the members of the group, and they decided to go for generic “time prepositions”).

The members of this group were receptive and followed the instructions carefully. They did most of the work in class and met twice out of school: one time to film the scenes, and one time to edit the video.

Discussion in class: It was the fourth video screened. This too was received positively by the students, and applauded. The only complaint was that the writings with the name of the characters were too small.



Fig.33– The Time Prepositions with their -ing medals

05.

Title: *Flat tyre*

Format: Video story (filmed clips + text)

Authors: Liceo Classico, Group 5

Moral: The verb “to stop” can be used in combination with “to” and the base form of the verb, to say that the subject stops to perform a certain action, and with the -ing form of the verb, to say that the subject decides to stop performing a certain action.

Story: In the first scene, we see To_Stop is driving her car, but she must stop because of a flat tire. In the second scene, To_Stop is smoking and suddenly realizes is bad for her health and decides to quit.

Concept and production: During the first meeting, this group needed help understanding the rule they chose and finding the moral. They struggled while finding ideas for the story, and in detaching from the examples in their book.

At the second meeting, the paper with the moral had been forgotten at home by one of them and the others looked angry; they re-wrote it and created two images (a man drinking, a man who decides to stop drinking) that corresponded to one of the examples they had in the book; the experimenter encouraged them to forget the examples and be creative; they brainstormed with the experimenter and said they would try some new ideas.

At the fourth meeting, when the experimenter talked with them, they showed her a partially filled screenplay and told her they had settled on two scenes: in one a girl is driving a car and has to stop to fix a flat tire (Fig.34), in the other one a girl throws away a cigarette because she decides to stop smoking. In both scenes, the girl represents the verb “To Stop”. The experimenter invited them to link the two scenes in a narrative frame (like the “a day in the life of Comma” in “The Comma Story”). It was clear they struggled having original ideas, but they did not give up and said they would try to do what the experimenter asked them. They met only once out of school, to film and edit the video.

Discussion in class: It was the second video screened. It was titled by the teacher, after the authors



Fig.34 – To_Stop stops and gets out of the car to change the flat tyre

did not offer any option. They did not know the word “tire”, hence in the video, they used the word “wheel”. Despite enjoying watching the video, the other students did not have positive comments on it. One student complained the scenes with text were too fast to be read.

06.

Title: *Shopping at the supermarket*

Format: Video story (filmed clips + text)

Authors: Liceo Classico, Group 6

Moral: To create a sentence with a subordinate, the sequence is: Subject + Verb + Possessive form of the adjective or object + Verb with “-ing” ending.

Story: A mum (Subject) and her daughter (Verb) go to the supermarket. The mum puts in the cart a jar of Nutellito (a spreadable cream that is meant to be a cheap version of Nutella, and which corresponds to the base form of the verb). Then she takes a loaf of bread (Her/Hers) and gives it to her daughter to put in the cart. In that moment the daughter realizes her mum bought the Nutellito and starts complaining. She stops only when the mother puts the Nutellito back and takes a Nutelling (-ing form of the verb, and the quality version of the product). The last image is a lovely shot of the two holding the bread and the Nutelling, showing the sequence in which these elements must be arranged to have a correct subordinate sentence (Fig.35).



Fig.35 – The elements of this rule all together: Subject (mother), Her/Hers (bread), Verb (daughter), -ing form (Nutelling)

Concept and production: At the beginning they encountered some problems because the rule they chose was quite rich. It was suggested they select just a part of it.

The idea of the supermarket came as an inspiration, and they kept it when they saw it could work. By the second meeting they had already thought out the full story. The experimenter invited them to characterize the characters more and strengthen the link with the linguistic elements.

During the third meeting the experimenter did not have the opportunity to talk with them, but she did during the fourth: the group was having fun, inventing strange names for the characters, and planning the shooting of the video. Their story worked and was very well represented in the screenplay template. When asked about the process, they told the experimenter that they thought of the last scene first and then built the story on that basis.

The members of this group were all very proactive, collaborative and energetic, and they all contributed to the work. They did most of the work in class, and met outside school only on one occasion, to film and edit the video.

Discussion in class: It was the first video to be screened. The students liked it, laughed and complimented the authors. The strengths they identified were the clarity of the final image, and the characterization of the elements in the story. They said it could be improved by including some visual signals to remember viewers which element the characters represent.

07.

Title: *How Much How Many (The Classroom)*

Format: Short movie

Authors: Middle-school, Group 1

Moral: “How many” is used with countable nouns, and “How much” with uncountable nouns.

Story: Professor How Many enters the Countable classroom and finds the students all seating at their place, well-behaved and calm. Then, he enters the Uncountable classroom, and they are acting like crazy, standing on chairs, throwing things around. Professor How Many is in shock and does not know how to react. Luckily for him, Professor How Much enters the classroom and tells him “That’s a job for me”. Professor How Much succeeds in calming the rebellious Uncountable students.

Concept and production: They started reasoning on the words their book associated with “much” and “many”, like “milk” and “orange juice”. They were invited to broaden their horizon, and they came up with the idea of an image where there are a certain number of people being counted, but then they become “uncountable” because they start moving around. At the end of the first meeting, they had already created a story, but the characters were generic “men”. They were invited to think of a situation where something like that could happen and find a role for these characters. They came up with the idea of the two classrooms. They did most of the work in class and met outside school only once to film the video.

Discussion in class: It was the third video shown in their session. It made the students laugh. Both creators and viewers complained about not hearing the sound, because there were several lines of

dialogue. The strengths mentioned by the students were: the use of sounds to complement the story, the clarity of the message. The weaknesses identified were that the story could be richer, and it lacked the presentation of the characters at the beginning and the moral at the end.

08.

Title: *The Question*

Format: Video story (filmed clips + text)

Authors: Middle-school, Group 2

Moral: The structure of the question using Present Continuous is: To Be + Subject + Verb -ing + Question mark

Story: To Be, Subject, and Verb -ing are three bullies. They target a girl, Question_Mark, but she is so sweet and calm that they decide to let her go. They hang out in the park together, and sit on a bench, but Question_Mark's influence is so strong now on the other three, that she is the one who decides in which order they sit. They are all happy with the arrangements.

Concept and production: During all three meetings, the members of this group were cooperative, and all contributed to the work.

Their original idea was different from the one they ended up realizing. As instructed, they created the characters first and thought of assigning a musical genre to each element: To_Be would be a pop singer, Subject a rapper, and Verb_-ing a jazz musician. In the first story they created, Question_Mark was a girl, living in the outskirts of a city called Sentence. She is alone, she does not have friends and is very sad. One day, walking down the street, she hears the three musicians practicing, first To_Be, then Subject, and finally Verb_-ing. They become friends, and when they try to perform together the result is sublime.

The experimenter told them the story was brilliant, but that they would also need to find a way to strengthen the link between the characterization (in this case, the musical genre) and the elements of the rule. Unfortunately, they got stuck trying to do this: they could not find a way to show the combination of the elements.

So, during the second meeting, they ended up deciding of opting for another story, that would be easier to produce. Again, they followed the storification procedure and created the characters first (unfortunately, the characterization was not very strong again). In the new story they gave more prominence to the need of the elements of being in a certain sequence for it to be correct.

After the discouragement of being stuck, the new story brought them new energy: by the end of the second meeting, they had filled the screenplay template with details and looked enthusiastic. After that, they met once out of school to film and edit the video.

Discussion in class: It was the first video to be screened in their session. The students said the strengths of this video were: the final image that made the rule very clear, the good lightening of the scenes, the music, their ability to deliver the message without talking. Only one weakness was mentioned: the writings could be bigger.

09.

Title: *Some & Any (Study buddies)*

Format: Short movie

Authors: Middle school, Group 3

Moral: “Some” is used with numerical plural nouns in affirmative sentences, and “Any” with numerical plural nouns in negative and interrogative sentences.

Story: Some and Any are two students. They get to a new school. The professor introduces them to their classmates, among whom there are Affirmative_Sentence and Negative_Sentence. The new students show their preferences straight away: Some befriends Affirmative_Sentence, and Any befriends Negative_Sentence. The story ends with the two pairs of newfound friends studying together.

Concept and production: Only two of the four members of this group were actively engaged, while one did not contribute, and another one simply followed the others. This is the group that looked the most frustrated by the forced cooperation.

The first version of the story was set in a class like theirs, where the students were countable plural nouns. Their emotions were Verbs, and they were variable. One day, two new students arrive: Some and Any. Some is with his classmates when they are influenced by the verbs in affirmative form, Any when they are with Verbs in interrogative or negative form.

The problem with this first version was that emotions cannot be seen, and they needed to make all the elements tangible. They were also encouraged to enrich the narrative.

The students brainstormed some more ideas. While doing it, only one member of the group paid attention to the message they wanted to deliver and was frustrated by the others throwing whatever idea they had in the bunch.

In the end, they decided to narrow the information to deliver, and with a little help from the experimenter they were able to set on the story they ended up producing.

They created a WhatsApp group they used to communicate and elaborate on their idea. Then they met outside of school once, to film and edit the video.

Discussion in class: It was the fourth video screened. It had long dialogues, essential for the understanding of the story, and the students were disappointed the audio system was not working. However, together with the experimenter, they live-dubbed it to allow their fellow students to understand. No one made comments about it. The experimenter criticized the weak characterization, but praised the bravery shown in including long spoken dialogues.

10.

Title: *Present Continuous (Puzzle)*

Format: Video story (filmed clips + text)

Authors: Middle-school, Group 4

Moral: The Present Continuous requires the following sequence of elements: Subject, Auxiliary “to be”, Verb, -ing ending.

Story: The story takes place in a garden, during a school break. Each character carries around a piece of a puzzle with her/his name. The ending -Ing is a girl who tries to befriend several people but is always rejected. First, she tries to stand next to a boy, He, and a girl, Runs. Their puzzle pieces match, and hers does not, so they send her away (and a textual frame explains she cannot stay with them because they are at the Present Simple). Then, -Ing sees a girl, She, and a boy, Laughs. They are having fun together and tries to join them, but she realizes her puzzle piece cannot combine with theirs and leaves sadly. A textual frame explains “She got it wrong again.” Finally, she sees three kids standing in the garden and looking lost. They are We, Are, and Read. With a big smile on her face, -Ing runs to them, and they rejoice of finally being together. One of them pulls out a book and they start reading together.

Concept and production: The idea of the puzzle pieces came to one of the members of the group at the very beginning and the others liked it. At the beginning they thought of having animated characters, shaped like puzzle pieces but with eyes and legs. The -ing form should have been a piece that moves inside a building, and in each room finds a different combination of puzzle pieces: she tries to match with them, but it does not work, until she finds the Present Continuous’ room. Then, they realized they did not know how to create the animation and decided to film themselves. The experimenter suggested they enrich the narrative part and enhanced the emotions and personalities of the characters. They did it but partially, and they kept it very simple.

In planning the video, they used the screenplay template and drew the scenes. They met three times out of school to work on this project: one to write the story, one to create the props (the puzzle pieces), one to film.

Discussion in class: It was the second video screened in its session. The strengths were: the clear and colourful signs which the characters hold in their hands and which clarified their role, its clarity.

11.

Title: *Four Brothers*

Format: Video story (drawings animated with Animotron + text).

Authors: Middle-school, Group 5

Moral: The verbs “have” and “must” are used to express obligations of different kinds.

Story: There are four brothers. Their names are Damon, Michael, Stefan, James. They are all Subjects. The first scene features Damon (Subject) and his mother (Must) who tells him he must wash his clothes (Fig.36); the following scene is a visualisation of the sequence, where the basket of dirty clothes represents the action of washing, therefore the Verb (Fig.37).

The mechanism is the same for the other three scenes: Michael (Subject) is stopped by a policeman (Mustn't) who tells him he must not drive fast (a car representing the Verb); Stefan (Subject) is told by his teacher (Have_To) that he must do his homework (a book representing the Verb); James (Subject) is told by the librarian (Have_Not_To) that he has not to take the book back because it is not needed the following day (a pile of books representing the Verb).

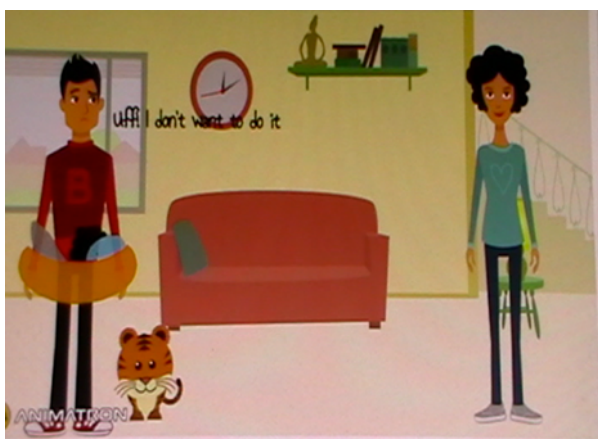


Fig.36 – Damon (Subj.) is told to do his laundry by his mother (Must)

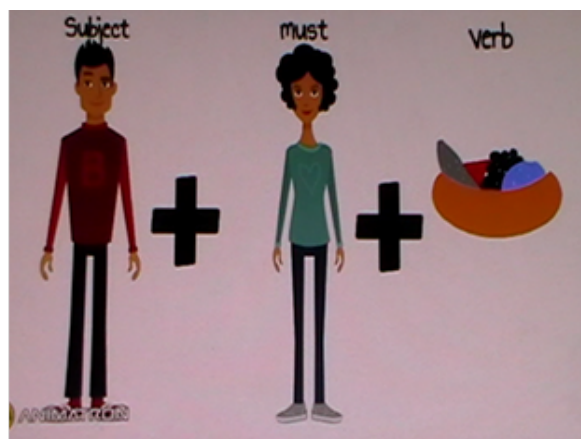


Fig.37 – The sequence Subject (son), Must (mom), Verb (do the laundry)

Concept and production: They created the images first, focusing on finding a human professional that could represent each of the verbal meanings. In the beginning, what would become a librarian was a priest (because he offers suggestions, but the sense of obligation he enforces is not as strong as a “must”). At the end of the first meeting they had already thought of all the characters. During the

second meeting they thought of linking them by having them be four brothers. They also thought of objects that could symbolize the actions, to give a visual translation of the example sentences.

They started planning the video in class, and then met three times out of school: two times to write the screenplay, draw the characters and decide which animation website to use, one to actually create the video.

Discussion in class: It was the last video of its session. The students followed the screening surprisingly silent and were very appreciative of the only video made with animation. They praised the clarity of its scenes and visual summaries.

12.

Title: *PPC Street*

Format: Short movie (the texts clarify the information, but it is not essential to the telling of the story).

Authors: Istituto Tecnico Commerciale, Class A, Group 1

Moral: The Present Perfect Continuous is formed by Subject, Auxiliary “To Have”, “Been”, “-ing” form of the Verb, in this order.

Story: The story is set in PPC (Present Perfect Continuous) Street. We see Subject serenely riding his bike, when the auxiliary To_Have cuts him off. To_Have is riding a motorbike (a child version in the video) and his manners are arrogant and aggressive. They have a short discussion and then Subject tells To_Have to follow him. To_Have aligns himself with Subject and the two ride together.

Then we see Been, who is a cautious character, is walking next to his bike while crossing the street. He crashes into To_Have, who gets mad at him because he scratched his motorbike. Been apologizes and starts following the two, placing behind To_Have.

They meet Verb + ing (a guy carrying a dog, representing “-ing”, on his back). Verb+ing asks them for a ride. He asks Subject first, but he says no, so he asks To_Have and then Been. They all refuse, but Verb+ing decides to follow them on foot anyway and positions himself behind Been.

In the last scene we see them crossing a garden, all lined up (Fig.38). A text on the screen tells us that “all together they form the Present Perfect Continuous”.

In the scenes, the characters are always indicated by a text overlapping on the image. In between each scene, there is an additional one where we see the line of characters parading in front of the camera, and a text appears on screen reiterating the sequence of elements up to that point.

Concept and production: During the first meeting, as soon as they started discussing an image, they had an idea. The first idea the group had was that of a soup, where each ingredient represents one of

the elements of the Present Perfect Continuous. Then they thought of a story in which an inexperienced cook puts the ingredients in the pot in the wrong order, and the chef must correct him. The experimenter told them that they should avoid using external characters, and turn the “ingredients” themselves in characters, by anthropomorphizing them and granting them agency.

By the end of the meeting, they had changed their idea and already invented a new story, which ended being the one they developed for the video. They were proud of their ability of being creative. To characterise their characters, they reflected on the meaning of the words and their role and found features for each element-

During the second meeting, they planned the video using the screenplay: they drew the scenes and filled all the information, asking the experimenter to check their work because they wanted to make sure they used the correct terminology. They engaged in animated discussions about linguistics and were all very active in contributing to the group work.

They discussed the production via WhatsApp chat and met once outside school to film the video. One of them took care of editing the video.

During the third meeting, they were proud to show their work, and explained the rule properly, showing a high level of confidence on the subject.

Discussion in class: This was the first video to be screened in its session. It made many the students laugh. The strengths were the clear ending image summarizing the rule and the clarity of the story in general, the humour. The members of the group were proud while talking of their rule and looked like they were very confident about it.



Fig.38– From right to left (to follow the sequence of appearance on screen): Subject on the yellow bike, To_Have on the “motorbike”, Been walking next to his bike and behind To_Have, Verb last with the white t-shirt and carrying -ing, the dog, on his shoulders.

13.

Title: *PP Friendzone*

Format: Short movie (names are superimposed as texts)

Authors: Istituto Tecnico Commerciale, Class A, Group 2

Moral: It is necessary to use the Past Participle to form the Present Perfect, whose sequence is: Subject, “Have To”, Past Participle.

Story: Verb+ing is a cool girl walking the corridors of her school. Two guys, Subject and Have_To, notes her and decide to make a move on her. She ignores them, and then explicitly rejects them. Subject and Have_To are disappointed, but notes another cute girl, Past_Participple. They go talk to her, and she is friendly with them. The three leave arm in arm, forming the correct sequence for the Present Perfect.

Concept and production: During the first meeting they chose to work on the Present Perfect. At the beginning they decided their characters were going to be Past Events and Present Events, and it was necessary to remind them they needed to include the Present Perfect somehow. It took them most of the first meeting to narrow the information and write a “moral”. They decided to work on how the Present Perfect is composed. At the end of the first meeting, they had an inspiration and drew the picture of two goldfishes kissing: one is the auxiliary To Have and the other the Past Participle. They were encouraged to develop on that.

During the second meeting, they created the story: goldfish To_Have swims in a water tank and meets several she-fishes (all base form verbs) but none is the one right for him. He finally meets Swum, and they fall in love.

Only one member of the group was happy with the idea, while the other three considered it “silly” or “too difficult to realize”. The experimenter encouraged them and offered suggestions.

Two members of the group were actively engaged and responsive, while the other two were slacking. While planning the video, they got all more engaged. Maybe because they had decided to change the story with the one they ended up producing.

They shot the video during a free period at school. It includes three scenes, and they edited them directly on their phone.

Discussion in class: It was the fifth video screened in its session. The effective elements of this video were the names on screen clarifying who was who, and the essentiality of it.

14.

Title: *Three doors*

Format: Video story (filmed clips + images + text)

Authors: Istituto Tecnico Commerciale, Class A, Group 3

Moral: The Present Perfect has three main uses: for events that have happened in the past, but we do not know exactly when; events of the past still influencing the present; actions started in the past and still ongoing in the present.

Story: The video opens on a white door. We see a hand opening it. Inside it is dark. The video cuts on a scene from the movie “Ice Age 3”. Then, the scene of the hand opening the door is repeated. This time the video cuts to an image of a house, followed by a video of a plane taking off, and the picture of another house. The scene of the hand opening the door is repeated a third time, followed by the image of a drawing where a boy is bouncing a ball on a wall. At the end, a text (written in Italian) clarifies the three uses of the tense.

Concept and production: That of the three doors was the first image that came to their mind after the explanation of Step 2, during the first meeting. They created an image for each of the uses of the Present Perfect and imagined that was what someone would see opening the doors.

During the meeting, they started losing confidence because they did not know how to link the three images. The experimenter tried to steer them in the right direction. Unfortunately, not all the members of the group were cooperative: only one of them was putting some effort into fulfilling the task, while two followed her without offering many solutions, and another one kept getting distracted and did not contribute to the work. This impacted negatively the whole activity for this group, one member ending up having the responsibility of carrying things on also for the others.

During the second meeting they seemed to have found a solution: there are three characters inside one door, from which they exit to enter their one individual door; each character represents one of the uses and so does the door it decides to enter. Their characters included aliens and other oddities. They were not sure of how to make their story into a video, and the experimenter gave them several suggestions, inviting them to opt for animation so that they could have whatever character or situation they wanted.

It is not possible to know how they worked autonomously on this, because the answers they gave in the questionnaire are all different. It was edited on a phone with VivaVideo.

During the third meeting it was necessary to ask one of the members of the group to explain the video to understand it. She explained that the “Ice Age” scene represented events that have happened in the past, but we do not know exactly when; the scene of the houses and the plane was meant to refer to

the fact that one might leave his/her house for a trip and go live somewhere else, but his/her house is still his/her house, so it referred to the use of the Present Perfect to talk about actions started in the past and still ongoing in the present; finally, the image of the boy bouncing a ball refer to the use for events of the past still influencing the present. This can be understood only knowing that, for this door, the experimenter suggested them to show a boy wearing historical clothes (past) throwing a ball and then receiving it while wearing contemporary clothes (present).

Discussion in class: It was the sixth video and last video screened in its session. While all the other videos were welcomed with laughs and comments, this left everyone in the class puzzled. Some commented aloud they did not understand it. One of the members of the group (the most active and engaged) had to explain their choices of images for the others to understand.

15.

Title: *Friends*

Format: Video story (filmed clips + text)

Authors: Istituto Tecnico Commerciale, Class A, Group 4

Moral: (as shown in the video) There are two uses for future form “will” and four for “be going to”.⁴⁹

Story: At the beginning of the video the characters are presented: Will, a girl wearing a yellow hoodie; Be_Going_To, a girl wearing a grey hoodie; a girl with glasses browsing through a book, who (a text tells us) is “a very meticulous person, who plans everything”; another girl indicating weather icons on a map hanging on the wall, who is “very precise and passionate about the weather”; a girl flipping nervously through the pages of a big binder and drinking coffee, who is “an anxious, worried and insecure person”; a girl wearing a funny Halloween hair piece who is “always festive, very talkative and extrovert”; a pensive girl who is “very impulsive” and whose decisions are always last minute; and finally a girl who is “thoughtful and unpredictable”.

After the presentation, we see Be_Going_To asking the festive girl to go out with her, but she refuses because she has plans with Will. So, Be_Going_To asks the weather girl and the coffee girl. The weather girl accepts the invitation and the coffee girl refuses, because she already has plans with Will. Then, Be_Going_To asks the precise girl, and she accepts. She asks also the impulsive and the thoughtful girl, but they both refuse. At the end we see the two groups of friends: Will has four friends, corresponding to its four uses (Fig.39), and Be_Going_To two (Fig.40).

Concept and production: Their first idea was the one they ended up producing. From the beginning they thought of having Will and Be_Going_To as their protagonists, and the different uses as friends

⁴⁹ It is not possible to know exactly which uses they refer to, because the video does not specify it.

they interact with. Be_Going_To asks some friends out, but some accept and others prefer hanging out with Will.

Two members of the group emerged as leaders, but nonetheless all the members contributed to the work, and were engaged and focused. They listened to the instructions and the suggestions they received. They discussed extensively on the characterization, and by the end of the activity had gained a deep knowledge of the rule. They did most of the work in class and met only once outside school to film and edit the video.

They targeted a large chunk of information and the result was a little bit complicated. During the third meeting the other students struggled with the understanding of the video, and it was necessary to provide extra explanations.

Discussion in class: It was the third video to be screened. Unfortunately, it was a little bit too rich and the students were lost in trying to figure it out, so they started chatting. The experimenter insisted on interpreting it as she did for the other two, but it was the most difficult moment, as half the class was chatting loudly. These interruptions slowed down the activity consistently.



Fig.39 – Future form Will with her four friends (contexts of use)



Fig.40 - Future form Be_Going_To with her two friends

16.

Title: *Present Continuous*

Format: Video story (filmed clips + text)

Authors: Istituto Tecnico Commerciale, Class A, Group 5

Moral: The Present Continuous employs the auxiliary To Be, and not To Have. The correct sequence of the elements for the Present Continuous is: Subject + To Be + Verb + -ing.

Story: We see four girlfriends hanging out together: they are Subject, To Be, Verb, and -Ing. They love walking in line (in the order of the Present Continuous, Fig.41). One day a guy, To Have, decides to target To Be. The other three see their friend being bullied, and immediately intervene. Together they drive away To Have and save To Be. The video ends with a group hug of the four elements of

the Present Continuous sentence. In the last screen, a text reminds us that the Present Continuous is formed by “Soggetto + To Be + Verbo + Ing”.

Concept and production: During the first meeting, they thought of representing the Present Continuous as a car, whose passengers are the components of the verbal tense. During the second meeting they decided to change it and created the story they ended up producing. The experimenter gave some suggestions (like to find a way to show they are the “Present Continuous Crew”). They listened and then started working on the screenplay.

During the workshop, not all the members of the group contributed equally, and they seemed to took turns in distracting. They were often caught talking about other things. Nonetheless, they were also able to carry on the task and asked some pertinent questions about the production of their video. They met once out of school to film the video, then one of them edited it.

Discussion in class: It was the fourth video screened in its session. The students appreciated the drama of the conflict, which made the story memorable.



Fig.41 – (From left to right) Subject, To_Be, Verb, and -Ing walking together in line

17.

Title: *Grammar Show*

Format: Short Movie (scenes with subtitles)

Authors: Istituto Tecnico Commerciale, Class A, Group 6

Moral: “Who” is the relative pronoun used for people, “which” for animals or things, “that” for all three.

Story: Who, That, and Which are three judges holding auditions for a new talent show called “Grammar Show”. The first aspirant enters the room: she is Person. The judges look at her: Who and That raise a green paper saying Yes, while Which raises a red one saying No. Then Animal enters the room. After a short dialogue, That and Which say Yes, while Who says No. The third aspirant enters: she is Thing (specifically, she says she is a can of Coke, and in fact she has a Coke label glued to her shirt). Again, That and Which say Yes, while Who says No (Fig.42).

Concept and production: At the beginning they included also “whose”, “where”, “when” in their moral, but cleverly decided to focus on relatives that functions as subjects. The first image they created was that of a group of clouds, each corresponding to one of the relatives. These clouds had faces, and would be sad and rain when over an element they did not concord with, while they would be happy and serene while hovering over an element they can refer to. During the second meeting, they decided to change and opted for the talent show because they “liked the idea more”.

The members of this group contributed to the work discontinuously, but one of the members was proactive and able to keep the others in line: she was also the one who filled the screenplay, with the intermittent help of her groupmates. Even if they sometimes got distracted, they engaged with the activity and kept a positive attitude for the whole time. They also asked several questions to the experimenter on how to obtain a good quality video. According to their questionnaires, they met twice out of school: one to discuss the project, and one to film and edit the video.

Discussion in class: It was the second video to be screened in its session. The other students identified the use of colour signs (green for the correct form, red for the wrong ones) as one of its strengths.



Fig.42– The three judges, Who, That and Which, expressing their vote on Thing

18.

Title: *For Since (In the Old West)*

Format: Short movie (few text, not essential for the story)

Authors: Istituto Tecnico Commerciale, Class B, Group 1

Moral: In a sentence with the Present Perfect Continuous, “since” is used to indicate when an action starts, while “for” is used to refer to its duration.

Story: The story is set in the Old West. The characters are introduced at the beginning. There is Mayor Two_Years, Sheriff For, and two bandits known as 2001 and Since. There is also a horse, whose name too is 2001 because he belongs to the bandit.

The story begins as Sheriff For has just captured the bandit Since and is waiting for some backup. Unfortunately for him, the bandit 2001 arrives with his horse, shoots the sheriff and frees Since, helping him escape. The two leave together, one next to the other, forming the combination “since 2001” (Fig.43). After they have disappeared, Mayor Two_Years arrives on the scenes, finds Sheriff For wounded, and helps him get back on his feet. The two leave together, again one next to the other forming the chunk “for two years” (Fig.44).

Concept and production: The members of this group showed great enthusiasm towards the activity from the very start, sometimes even too much: when during the first meeting they were required to think of the characters and create the visual metaphor, they were already discussing a story. They had decided to work on the uses of the future form with “will” and were discussing scenes where a character named Will is seen while doing actions that can be described using sentences including “will”. The experimenter had to remind them they were asked to transform the information and not contextualize it. She also invited them to follow the steps as required and think of an image first. They listened and then went back to discussing animatedly.

The next time, at the second meeting, they told the experimenter they had decided to work on another information: the role of “for” and “since” in the sentences with Present Perfect Continuous. They had already thought of the story, which they had drawn, and had started filling the screenplay. The experimenter offered some suggestions, like making sure they characterized the characters consistently with their elements. They payed attention to what she had to say and asked many questions. Even if chaotic and sometimes hasty, all the members of the group contributed to the work and did it with energy. They were heard engaging in passionate discussions about what a preposition is, for example, and how to visually represent it.

They met twice out of school to discuss the story and film the video, and they “had a great time” as they wrote in the questionnaire. It was shot on a Go Pro Camera and edited with VivaVideo.

During the third meeting, the members of the group were very proud to present their product, which was very much liked by their classmates. They insisted on explaining the rule and the meaning of the video personally, showing a high level of confidence with the content.

Discussion in class: It was the third video to be screened in its session. It was greatly appreciated for its originality and humour. Its authors were particularly proud of their work, and explained the rule and how they worked on it to the class with joyful enthusiasm.



Fig. 43 – The two bandits Since and 2001 flee together



Fig. 44 – Sheriff For is rescued by Mayor Two_Years

19.

Title: //

Authors: Istituto Tecnico Commerciale, Class B, Group 2

Moral: “Will” is used when talking about things that will for sure happen in the future, while “Be going to” for hypothetical predictions.

Story: Will and Be Going To are two guys who decide to go together to a party. The first is very rigorous: he has decided he will leave the party and go back home at 9 pm, and so he does. The other is more relaxed: he told Will he would leave with him at 9 but ends up staying for longer.

Concept and production: This group did not make the video because, they said, they did not have the opportunity to meet outside school.

The members of this group were slacking for most of the time in class, except for one, so it might also be for a lack of motivation that they ended up turning in nothing. However, the group is included in the data because they applied the storification procedure, and it might be interesting to know more about how it went for them.

During the first meeting, they got the idea of a party because a member of the group had been to a party on the previous day. They elaborated on that and by the end of the second meeting had started planning the video using the screenplay template provided: they planned a first scene at the party, where we see Will and Be_Going_To with the other guests; then a second one where they have a dialogue and discuss about when they want to leave. The experimenter suggested them to exaggerate

their features and find a way to characterize them. She also provided suggestions on how to create a video even if they could not meet in person (they could opt for using drawings, for example).

During the third meeting, they were all supportive of the others, except for one who kept criticizing the other groups' videos.

20.

Title: *PS and PPs' Story*

Format: Video story (filmed clips + text)

Authors: Istituto Tecnico Commerciale, Class B, Group 3

Moral: The Present Perfect is a composed verb tense and it is necessary to use the auxiliary "to have", while the Past Simple does not need an auxiliary.

Story: The auxiliary To_Have is a girl who is tired of being alone and wants to make friends. She is taking a walk in the park, when she sees a group of people chatting. They look cool, and the auxiliary approaches them with a smile. Unfortunately, they are the Past Simple group, known for "being bad". They act all though, give her a bad look, and reject her (Fig.45). She leaves, goes to seat on a bench and starts crying. Another group of people, the Present Perfect group, sees her (Fig.46). They are friendly and generous and go talk to her. They welcome her in their group, and the auxiliary To_Have is happy to have finally found her place.



Fig.45 –To_Have is rejected by the Past Simple group

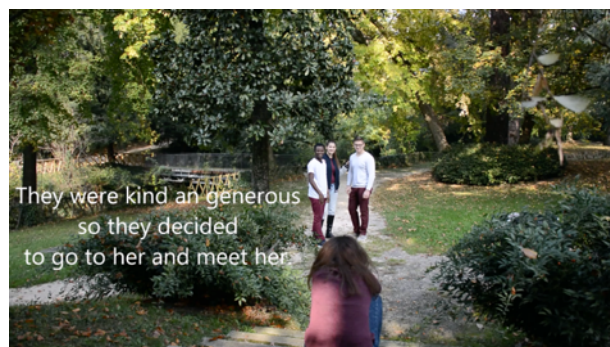


Fig.46 – To_Have is welcomed in the Present Perfect group

Concept and production: The story they created after the first meeting was also the one they ended up producing. After they shared it with the experimenter, she told them to think of some characterization. She also told them that, being the Present Perfect a combination of auxiliary and past participle, it was necessary to show the auxiliary interact with the different past participles in the group they named Present Perfect. The members of this group showed a discontinuous interest towards the activity but did their best to do what they were asked to do. Some of them were older students, some were foreigners and struggling with the language. Nonetheless, they were able to complete the task. They met once outside school to film the video, and another time two of them met

to do the editing. One of the members of the group was strongly interested in video making, and highly motivated by that.

Discussion in class: It was the first video to be screened in its session. The students appreciated the musical comments and the ability of the actors of being very expressive. What they thought was lacking was some examples of the construction the story talked about.

21.

Title: *Present Perfect Continuous (The Interview)*

Format: Short movie

Authors: Istituto Tecnico Commerciale, Class B, Group 4

Moral: The Present Perfect Continuous is formed by: Subject, “has/have”, “been”, verb+ing.

Story: A woman named She is the manager of a society which is hiring, and she is holding the interviews. Two girls enter the room, Have and Has. The interview begins, and at the end She offers the job to Has who accepts. Then, it is the turn of two other applicants, Was and Been. She chooses Been, and Was leaves upset. The last pair of applicants consists of two other girls, Ed and Ing. When She chooses Ing, Ed cannot hide her disappointment (Fig.47). The story ends with She who calls back the selected applicants. They are now her team. Standing next to each other they form the construction of the Present Perfect Continuous (Fig.48).



Fig.47 – The ending -Ed (right) being rejected for -Ing



Fig. 48 – From the left: She, Has, Been, -Ing

Concept and production: The first idea they had was of transforming the elements of the rule in pin pals and then telling of a girl who plays bowling. The experimenter reminded them that all the characters in the story must correspond to elements of the rule, and that the character of a girl cannot be simply “a girl”. They understood the correction and talked a little bit longer. This group was very enthusiastic and loud. The production of the video got them particularly excited. By the beginning of the second meeting they had already created a story, that would go on to be the one they produced. At first, they thought the main character was going to be “I”, and then switched to “She” because they understood it would be better linked, being a girl the one playing it.

They met once out of school to film the video. In the questionnaire, two members of this group wrote that in that occasion they worked on the characters and tried to embody them, and that they had fun doing it, but they also understood the rule better.

Discussion in class: It was the fourth (and last) video screened in its session. It was very clear, and the students also appreciated the effort the members of the group put into the acting.

22.

Title: *Some Any*

Format: Video story (filmed clips + text)

Authors: Istituto Tecnico Commerciale, Class B, Group 5

Moral: “Any” is used in negative clauses and “Some” in positive clauses

Story: Any is a girl who wakes up and goes to the kitchen to have breakfast. When she opens the cabinet to take the food, she realizes she has run out of chocolate. She is very disappointed and decides to go out to buy it. She leaves the house and goes to the supermarket (Fig.49). As soon as she gets to the right isle and her hand touches the chocolate bar, she is engulfed in a cartoonish cloud and transforms into Some, a girl smiling happily (Fig.50).



Fig.49– Any in the chocolate's isle at the supermarket



Fig. 50 – After the transformation into Some

Concept and production: This group was very autonomous and engaged. They did not need too much prompting to carry on the task. During the first meeting, they had decided to work on uncountable and countable nouns and adjectives, but in the middle of the second meeting they realized the piece of information they selected was too intricate and that they were stuck. They decided to narrow the information and focus on a smaller portion. One of the members of the group was hungry and had the idea of the supermarket. The others liked it and they started elaborating on it. Together with the experimenter they thought of possible characterization (ending up keeping the positive attitude of Some and the negative one of Any).

They met four times out of school: twice to work on the story, one to shoot the scenes, and one to edit the video.

Discussion in class: It was the second video to be screened in its session. Its sound effects and visuals were very much appreciated by the other students.

6.3.3 Questionnaire

The questionnaire consisted of 32 questions. It aimed to evaluate the workshop and the storification procedure. The first section (questions 1-4) collected information on the students' stories in order to check if the members of the same group were in agreement, but also to have their perspective on the process of creating them. The second section (questions 5-8) investigated the level of understanding and the difficulties experienced while applying the storification procedure. The third section (questions 9-13) did the same for the part of the workshop on video production. The fourth section (questions 14-17) investigated the cognitive effects of the workshop by asking the student to evaluate their understanding and remembering of the grammar rule before and after the storification procedure. The fifth section (questions 18-19) had each student evaluate his/her product. The sixth section (questions 20-21) asked them their opinion about the work group, and the seventh section (questions 22-27) about the other students' videos. The eighth section (questions 28-30) investigated how the students felt during the workshop and what they liked or disliked. The ninth asked them if they would like to repeat the lab or apply again the storification procedure (question 31), and then left them space for free commenting (question 32).

To apply the storification procedure, students needed to have clear what it was asked of them. Question 5 investigated this, by asking the students to evaluate their understanding of the instructions.

Question 5: Evaluate your understanding of the instruction provided in relation to the STORIFICATION PROCEDURE					
	Average	L. Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Step 1 – Writing the moral					
I did not understand what to do	3%	4%	4%	0%	4%
I understood but I had doubts	28%	9%	30%	26%	44%
I understood what I had to do	69%	87%	65%	74%	52%
Step 2 – Visualize the moral (ending scene)					
I did not understand what to do	3%	5%	0%	0%	7%
I understood but I had doubts	39%	30%	44%	41%	41%
I understood what I had to do	59%	65%	56%	59%	52%
Step 3 – Create the story					
I did not understand what to do	3%	0%	0%	4%	7%
I understood but I had doubts	29%	35%	30%	11%	41%
I understood what I had to do	67%	65%	70%	85%	52%

Table 15 – Data collected in response to Question 5 in the questionnaire submitted to the students during the Grammar Stories workshop

According to their answers, most of the students understood what they were asked to do, and only a small percentage understood nothing. Many of them had doubts, but they cleared them with the help of their classmates (average 65%) or of the experimenter (29%), while only a few ended up keeping them (6%), as the answers to Question 6 tell us.

The first and the third step of the procedure seem to have been easier to understand than the second, which is the one involving the characterization of the linguistic elements.

Comparing the individual results, the students in Class B seem to have been the ones that struggled the most, even more than the younger students in middle-school.

This as far as understanding is concerned. Then Question 7 investigated how easy or difficult the actual application of the storification procedure was for them. For this question, Step 2 was considered as divided in two phases: transforming the linguistic elements into characters, props, settings, and composing them into a scene. The San Remo's trial has highlighted how characterization was sometimes problematic for the students, and it was important to investigate it individually.

Question 7: How it was to apply the storification procedure?					
	Average	L. Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Step 1 – Writing the moral					
Very difficult	2%	0%	0%	4%	4%
Difficult	1%	0%	4%	0%	0%

Fairly difficult	18%	13%	21%	26%	11%
Fairly easy	32%	22%	38%	41%	26%
Easy	39%	52%	24%	22%	59%
Very easy	9%	13%	13%	7%	0%
Step 2.1 – Transforming linguistic elements					
Very difficult	3%	7%	0%	4%	0%
Difficult	5%	7%	0%	7%	4%
Fairly difficult	25%	13%	30%	22%	35%
Fairly easy	47%	60%	43%	52%	35%
Easy	17%	13%	22%	15%	19%
Very easy	3%	0%	5%	0%	7%
Step 2.2 – Creating the ending scene					
Very difficult	2%	0%	0%	8%	0%
Difficult	2%	0%	0%	0%	3%
Fairly difficult	16%	4%	23%	15%	22%
Fairly easy	42%	35%	50%	48%	37%
Easy	32%	57%	23%	22%	30%
Very easy	6%	4%	4%	7%	7%
Step 3 – Creating the story					
Very difficult	1%	0%	0%	4%	0%
Difficult	11%	9%	8%	15%	12%
Fairly difficult	24%	9%	25%	22%	38%
Fairly easy	38%	39%	37.5%	48%	27%
Easy	22%	43%	17%	11%	19%
Very easy	4%	0%	12.5%	0%	4%

Table 16 – Data collected in response to Question 7 in the questionnaire submitted to the students during the Grammar Stories workshop

These data highlight how Step 1 did not present difficulties, while Step 2 and 3 were more challenging.

The students of Liceo Classico had a better time with this than the students of the Istituto Tecnico, whose results are sometimes very similar to those of the middle school's students.

Even though the transformation of the linguistic elements into characters, props, settings was judged easy or fairly easy by the majority of the students, their stories and the experimenter's diary tell us it was a critical element for them. Also in the answers provided to Question 8 (which gave them the opportunity to specify what was difficult for them) the most mentioned are having an idea for the

story or finding a way to represent the rule. For all these reasons, the answers to Question 7 are better taken with a pinch of salt.

The same questioning that was done for the storification procedure about the understanding of the explanation and its actual application was done for the part of the workshop devoted to video making.

Question 9: Evaluate your understanding of the instruction provided in relation to VIDEO MAKING					
Filling the screenplay template	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
I did not understand what to do	2%	0%	4%	4%	0%
I understood a part	14%	9%	4%	11%	31%
I understood most of it	46%	64%	57%	33%	34%
I understood what I had to do	38%	27%	35%	52%	35%
Shooting a video					
I did not understand what to do	0%	0%	0%	0%	0%
I understood a part	10%	9%	18%	4%	12%
I understood most of it	40%	27%	41%	42%	46%
I understood what I had to do	50%	64%	41%	54%	42%

Table 17 – Data collected in response to Question 9 in the questionnaire submitted to the students during the Grammar Stories workshop

These data tell us that this part was understood by most of the students, and just a small portion had troubles with it. Considering it for most of them it was the first experience with video making, it is only fair many did not understand everything. This is even more true when talking about the younger students who, in fact, proved to be a little more unsure.

Considering they said they understood the explanation on video making, it is even more interesting to see if their practical experience matches the expectations. This is investigated by Question 11.

This question's enquiry divided into three parts: it asked about the students' experience with writing a screenplay (or better, filling a screenplay template), shooting a video, and editing a video.

The latter will not be included in the analysis, since not all the students were involved in that part. It was usually taken care of by one member of the group, and it is not possible to isolate only the answers of these students. However, it should be said that editing was indicated as one of the main challenges in several comments.

Question 11: How it was to ...					
Write a screenplay	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Very difficult	0%	0%	0%	0%	0%
Difficult	2%	0%	0%	4%	3%
Fairly difficult	26%	13%	26%	33%	30%
Fairly easy	53%	70%	52%	41%	52%
Easy	17%	17%	17%	19%	15%
Very easy	2%	0%	5%	4%	0%
Shoot a video					
Very difficult	3%	0%	0%	0%	14%
Difficult	2%	0%	4%	3%	0%
Fairly difficult	17%	5%	32%	19%	14%
Fairly easy	36%	30%	32%	41%	38%
Easy	33%	61%	23%	22%	29%
Very easy	9%	4%	9%	15%	5%

Table 18 – Data collected in response to Question 11 in the questionnaire submitted to the students during the Grammar Stories workshop

For the majority of the students, planning and making a video was easy, while the number of people who found it difficult is smaller but significant.

The Liceo Classico's students seemed to have had less difficulty writing the screenplay, than the other students. The middle-school students struggled the most. This is probably due to their younger age and likely lower technology skills, but also to the fact they had to meet after school. Because the groups were not chosen by them but assigned, some of them probably ended with classmates they do not know well or even do not get along with (see Question 20 for further data on this topic).

Did the activity impact their linguistic ability? An answer to this question comes from the data collected with Question 14.

Question 14: Select one option – “After the activity, I feel that ...”					
“... I <i>understand</i> the rule I worked on better”	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	3%	5%	4%	0%	3%
Slightly disagree	22%	30%	13%	15%	30%
Agree	54%	35%	61%	70%	48%
Agree strongly	21%	30%	22%	15%	19%

“... I <i>remember</i> the rule I worked on better”	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	2%	4%	5%	0%	0%
Slightly disagree	10%	5%	17%	7%	11%
Agree	53%	43%	43%	56%	67%
Agree strongly	35%	48%	35%	37%	22%

Table 19 – Data collected in response to Question 14 (parts 1,2) in the questionnaire submitted to the students during the Grammar Stories workshop

The majority of the students said the activity did impact their understanding and remembering of the rule.

It is interesting to note a difference between high-school students and middle-school students: the firsts said the workshop helped them understand more than remembering, while the latter said the opposite. This might be due to a difference in knowledge and experience: younger students know less, therefore their feeling of discovering is stronger than for the older students.

A third part to Question 14 investigated the effects the workshop had on how the students feel towards English.

“... I feel more confident about the English language”	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	16%	26%	9%	11%	19%
Slightly disagree	44%	43%	30%	44%	55%
Agree	33%	31%	52%	30%	22%
Agree strongly	7%	0%	9%	15%	4%

Table 20 – Data collected in response to Question 14 (part 3) in the questionnaire submitted to the students during the Grammar Stories workshop

The workshop seems to have the potential to help students gain confidence towards English, but it still not there. The more critical were the Liceo Classico's students, while the more optimistic were the middle-school students. One of them wrote in a comment “I had fun and I also got more passionate about English” (“Mi sono divertito e anche appassionato di più all'inglese”). Given more time, there are good chances the activity might serve this purpose for more students.

Going back to the evaluation of the workshop's effectiveness in facilitating understanding and remembering, Question 15 goes into details.

Question 15.1: Evaluate how much each action helped you UNDERSTAND the rule better					
Visualizing the rule's elements as characters, props, settings	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
It did not help me at all	6%	9%	4%	4%	3%
I helped me a little	17%	26%	6%	9%	23%
It helped me	69%	52%	78%	78%	66%
It helped me a lot	8%	13%	4%	9%	8%
Inventing a story to represent the rule					
It did not help me at all	2%	1%	1%	0%	7%
I helped me a little	19%	26%	17%	15%	19%
It helped me	58%	59%	68%	52%	62%
It helped me a lot	18%	14%	14%	33%	12%
Transforming the story in a video					
It did not help me at all	10%	13%	0%	3%	23%
I helped me a little	24%	26%	39%	15%	19%
It helped me	51%	39%	43%	67%	50%
It helped me a lot	15%	22%	18%	15%	8%
Question 15.2: Evaluate how much each action helped you REMEMBER the rule better					
Visualizing the rule's elements as characters, props, settings					
It did not help me at all	3%	5%	4%	4%	0%
I helped me a little	17%	38%	17%	4%	15%
It helped me	69%	52%	75%	73%	70%
It helped me a lot	11%	5%	4%	19%	15%
Inventing a story to represent the rule					
It did not help me at all	2%	0%	4%	0%	4%
I helped me a little	23%	38%	17%	15%	23%
It helped me	58%	48%	75%	48%	61%
It helped me a lot	17%	14%	4%	37%	12%
Transforming the story in a video					
It did not help me at all	7%	9%	0%	4%	15%
I helped me a little	27%	29%	35%	15%	31%
It helped me	50%	38%	52%	70%	39%
It helped me a lot	16%	24%	13%	11%	15%

Table 21 – Data collected in response to Question 15 in the questionnaire submitted to the students during the Grammar Stories workshop

All three parts of the workshop were considered useful by the majority of the students. Looking at the averages, visualizing the rule's elements was judged the most useful both for understanding and remembering, followed by creating a story, and last making a video. This is very good news for the storification procedure: despite the fact video making was the activity that got the students the most excited, they were able to recognize that the visualization and creation of the story were impactful on their linguistic ability.

Also the answers to Question 17 provide useful information on the cognitive consequences of the workshop. It was an open question which asked students to think of the rule they have worked on and say what came first to their mind: the story they created, or the grammar rule as written in the book? 68 students out of 101 provided an answer to this question, and 52 of them (76%) said they thought of the rule first. If we look at these answers in each individual class, the percentages are very similar: 80% in the Liceo Classico, 82% in the middle-school, 84% in Class A and 75% in Class B of the Istituto Tecnico. In the comments, a student wrote "I understood more from the story", another "It was better than the book". They said they thought of the story first "because it is something I have seen and then I link it to the rule in the book", and also "I remember the scenes and then the moral we wrote".

It is interesting to note there are three winning factors the grammar stories seem to have: they help students visualize images and build a link with the explanation in the book, they require students to work actively and extensively on the content (and grow confident about it), they require students to re-elaborate the rule to create the moral and to do so they need to really understand the rule.

Another important aspect to evaluate is the experience of each student as a member of a group. The storification procedure and the video were meant to be the product of group work, and the inner dynamics of each of the groups are likely to have heavily influenced the result. This is investigated by Question 20.

Question 20: Select one option					
All the members of my group contributed to the product	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	12%	5%	9%	15%	18%
Slightly disagree	21%	17%	35%	15%	18%
Agree / Strongly agree	67%	78%	56%	70%	63%

All the members of my group contributed equally to the product	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	13%	9%	5%	15%	23%
Slightly disagree	25%	13%	43%	26%	19%
Agree / Strongly agree	62%	78%	52%	59%	58%

Table 22 – Data collected in response to Question 20 in the questionnaire submitted to the students during the Grammar Stories workshop

It does not come as a surprise that the class that lamented more inequities in the division of the workload was that of the middle-school students, as pointed out in a previous occasion. The reason might reside in the allocation operated by the teacher: she mixed strong students with weaker students; sometimes the collaboration was fruitful, other times it mainly caused frustration for all group members. The class that cooperated best was that of the Liceo Classico. They were already familiar with group work, and were likely influenced also by the positive and cooperative attitude of their teacher.

Another important element to take into consideration is how the students felt. This is fundamental in the framework of a humanistic-affective approach in education. Students were asked about how they felt during the workshop in Question 28. They could choose how many options they wanted.

28. How did you feel during the lab?	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
interested	29%	31%	30%	28%	27%
inspired	12%	13%	10%	14%	10%
curious	17%	21%	16%	13%	20%
amused	27%	24%	27%	29%	28%
confused	5%	6%	3%	5%	6%
bored	6%	3%	4%	6%	7%
anxious	2%	0%	4%	3%	0%
scared	1%	2%	2%	2%	0%
Other:	1%	0%	4%	0%	2%

Table 23 – Data collected in response to Question 28 in the questionnaire submitted to the students during the Grammar Stories workshop

The most frequently chosen adjective was “interested”, followed by “amused”, “curious”, “inspired”. A smaller percentage (27%) chose negative emotions (“confused”, “bored”, “anxious”, “scared”). The choice of “confused” is not surprising, considering the novelty of the activity, and it was almost

always chosen in combination with positive emotions. This is further proof that having doubts does not necessarily translate into having a bad experience.

Among the students who picked at least one negative adjective, the 89% also picked positive adjectives, and only the 11% (3 students) chose only negative emotions.

The motivations given for the negative emotions are mainly five: boring explanations, stress of showing the video to the classmates, struggle in finding the idea, editing the video, uselessness of the workshop. No method is perfect, and negative comments are to be expected. However, it is important to note that only a small percentage did not find anything they liked in the whole experience.

It is interesting to note that the most critical towards the activity were the Liceo Classico's students. This corresponds to the observations in class: they were the most puzzled by the oddity of the workshop.

Since emotions are important, and having students experience positive emotions and enjoying what they are doing is the key to learning, Question 30 evaluated the opinion of the students on each individual activity of the workshop. The question included also the activity of editing the video, but it was excluded here for the reasons we have already explained.

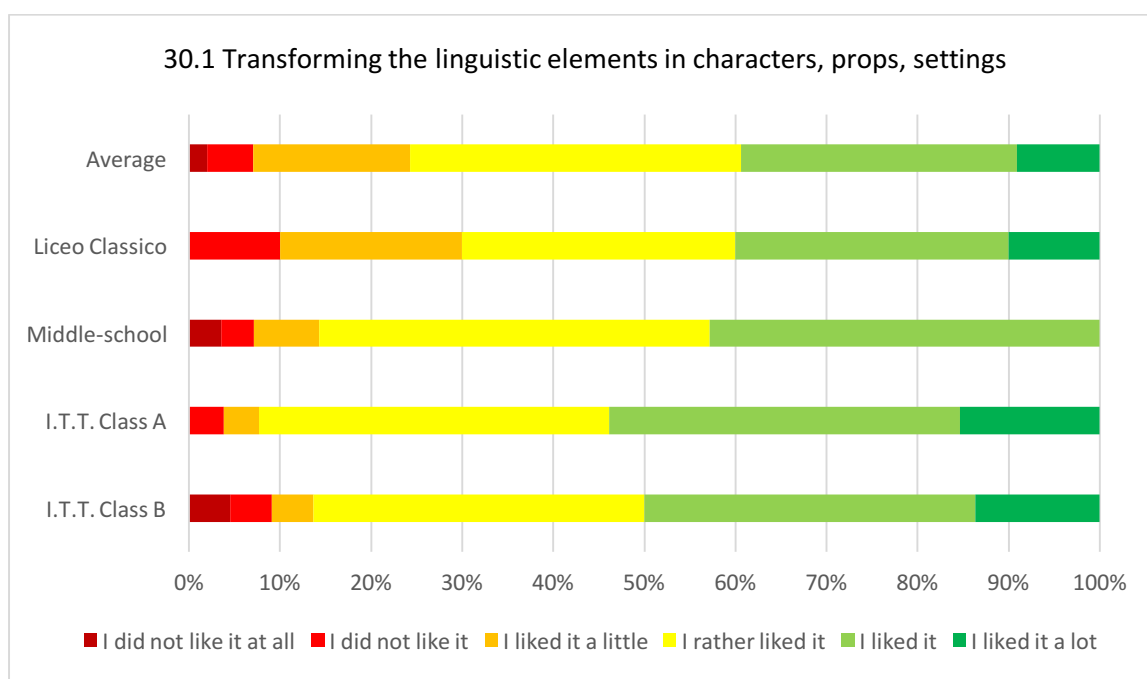


Fig.51 – Data collected in response to Question 30, part 1 in the questionnaire submitted to the students during the Grammar Stories workshop

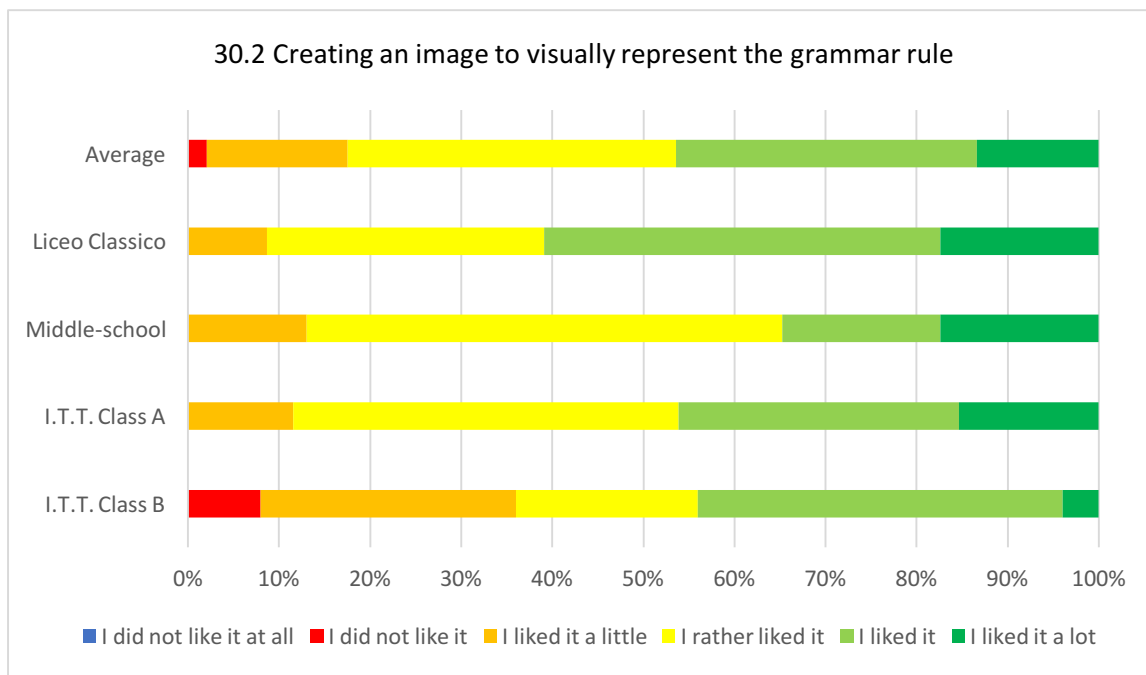


Fig.52 – Data collected in response to Question 30, part 2 in the questionnaire submitted to the students during the Grammar Stories workshop

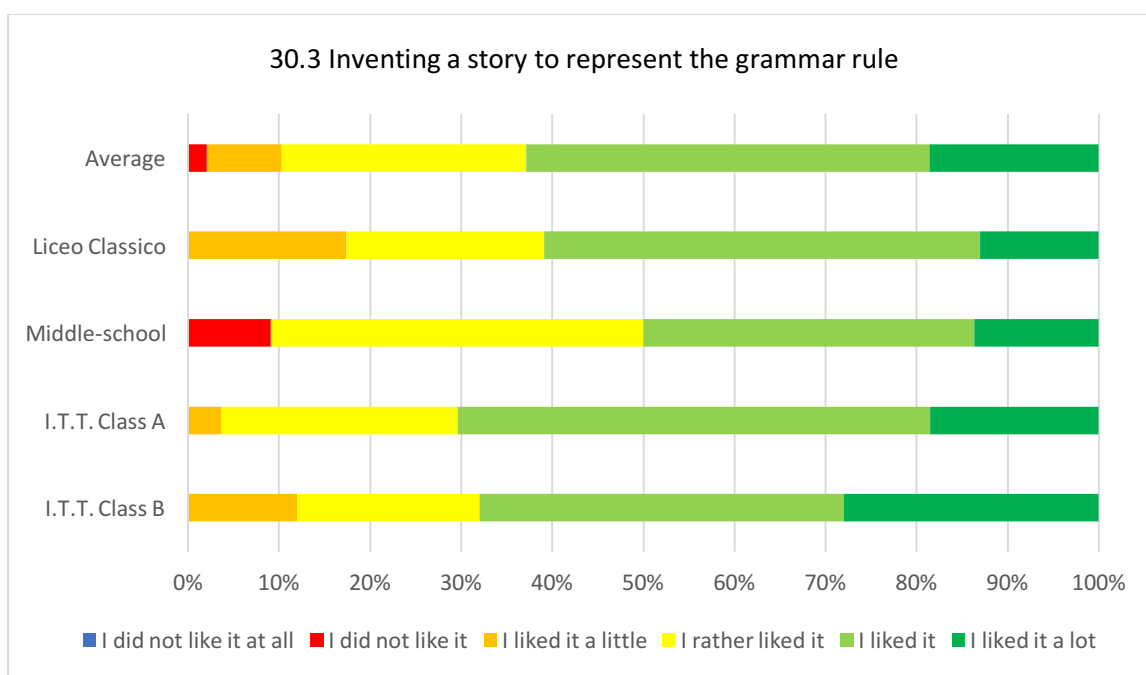


Fig.53 – Data collected in response to Question 30, part 3 in the questionnaire submitted to the students during the Grammar Stories workshop

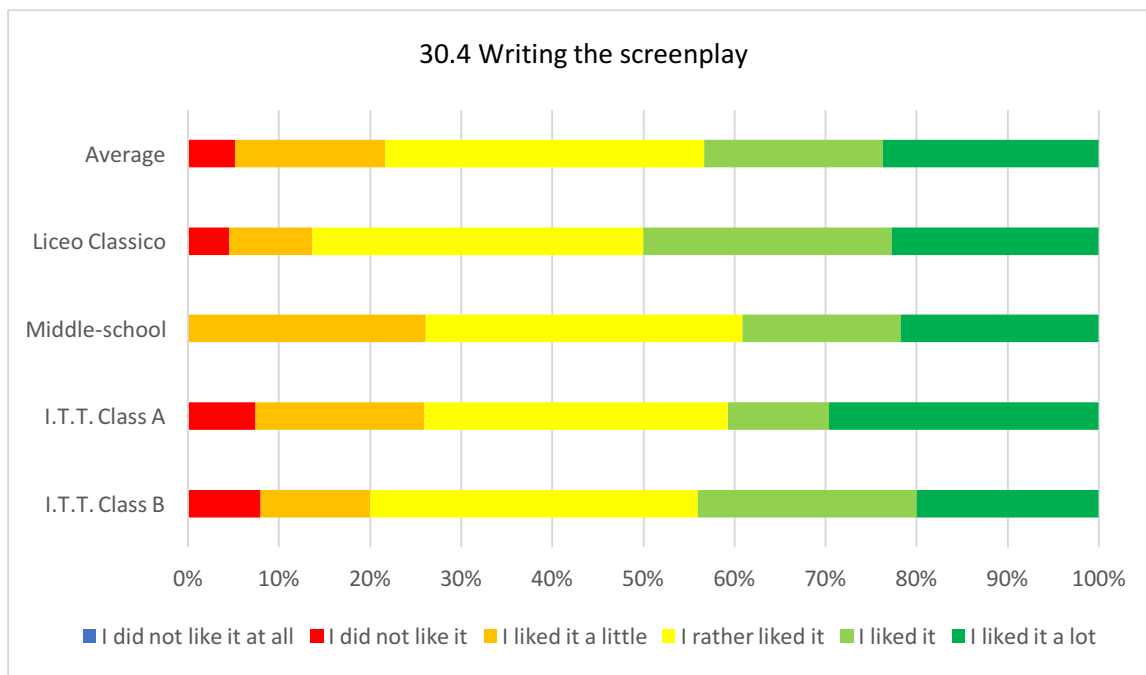


Fig.54 – Data collected in response to Question 30, part 4 in the questionnaire submitted to the students during the Grammar Stories workshop

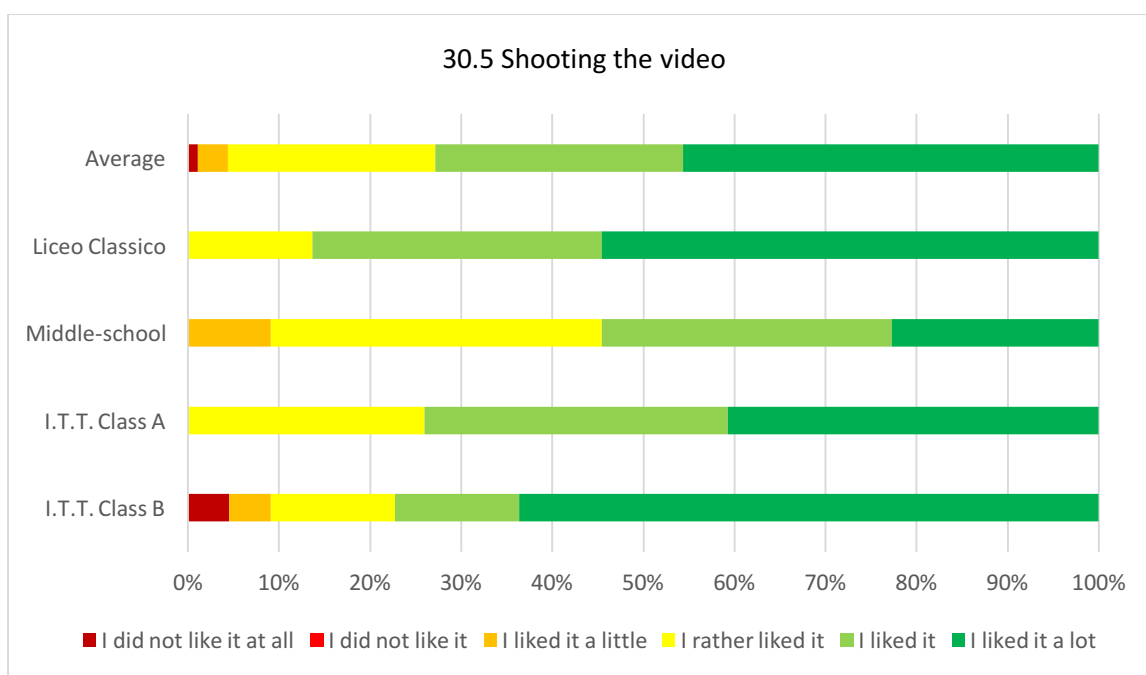


Fig.55 – Data collected in response to Question 30, part 5 in the questionnaire submitted to the students during the Grammar Stories workshop

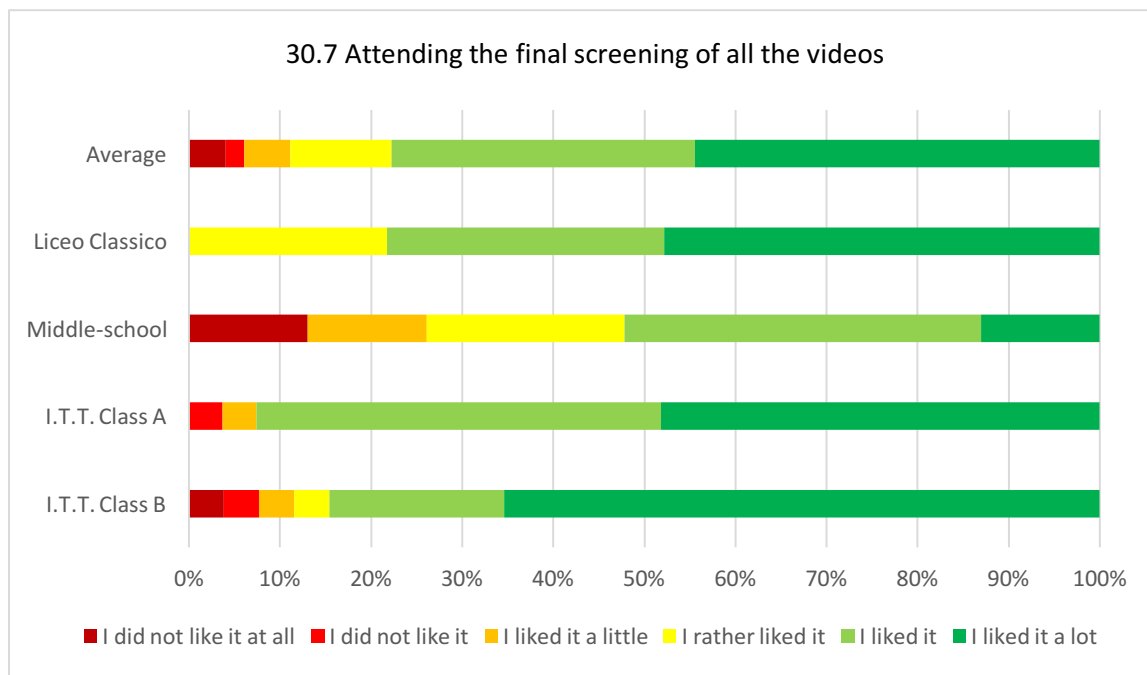


Fig.56 – Data collected in response to Question 30, part 7 in the questionnaire submitted to the students during the Grammar Stories workshop

Finally, a general evaluation of the activity was asked, with the aim to understand if the students would be willing to repeat the experience or not.

Question 31.1: I'd like to do this workshop again	Average	Liceo Classico	Middle-school	I.T.T. Class A	I.T.T. Class B
Disagree	4%	0%	5%	0%	11%
Slightly disagree	15%	35%	13%	4%	12%
Agree	49%	48%	43%	78%	27%
Strongly agree	32%	17%	39%	18%	50%
Question 31.2: I'd like to use the storification procedure again					
Disagree	6%	14%	5%	0%	7%
Slightly disagree	23%	30%	23%	15%	27%
Agree	39%	30%	45%	48%	31%
Strongly agree	32%	26%	27%	37%	35%

Table 24 – Data collected in response to Question 31 (parts 1,2) in the questionnaire submitted to the students during the Grammar Stories workshop

The results are encouraging. The majority of the students showed appreciation towards the experience and would be willing to do it again.

The last section of the questionnaire was really just a space for students to write whatever they wanted to share about the experience. Among the 56 free comments left here, 39 (76%) were positive, and only 5 negative (the remaining only contained suggestions or thanked the experimenter). They show that the students considered the workshop to be pleasant (11 references like “wonderful idea”, “fantastic”, “great”) and entertaining/engaging (10 references like “amusing”, “engaging”). Being judged as a pleasant and engaging activity is an essential element for being effective. In addition to its pleasantness, the students praised the workshop for being useful (13 references in the free comments, like “useful”, “educational”, “interesting”, “effective”). Several wrote it helped them understand, remember, learn.

A student even wrote: “I hope the school will be willing to promote this project, which is useful and emotional, and that all the students of this school will have the opportunity to do this project, which, in my opinion is very effective.”⁵⁰

6.3.4 Teachers' interviews

When the workshop was over, each of the three teachers involved was interviewed. The interview was a semi-structured, starting from these questions: Did you think the workshop was useful, and how? What were the strengths and the weaknesses of this workshop? Did you note any differences in the behaviour of your students? Would you do the workshop again with your students? Would you apply the storification procedure again, by yourself or with your students?

The questions were used as starting points and then the teachers were let free to give their opinion and share their thoughts.

The three teachers showed different attitudes. The Liceo Classico’s teacher was encouraging towards the project, and cooperative in class. She was inclined to experiment with new techniques to engage her students and facilitate their learning. The middle-school’s teacher had just got the job and was at her first experience of teaching in that context. She was still getting to know the students at the time of the experiment, and she was facing some resistance on their part: their previous teacher had a conflictual relationship with them, and most of them developed a dislike for the language. Her teaching style was traditional, and she looked less inclined to get involved in this type of non-structured activities. The decision of having the workshop was made by the principal of the school, not hers. Seeing the young age of her students and their turbulent past with English, she felt she

⁵⁰ “Vorrei che la scuola sia più disponibile per portare avanti questo progetto utile e emotivo, e che tutti gli alunni della scuola possano anch’essi usufruire di codesto progetto, per me, molto efficace”

needed to actively enforce discipline, and intervened several times during the workshop. She also decided to evaluate the students and give them marks in order not to “waste an opportunity”. For these reasons, she also followed them closely between the meetings: she regularly checked on their work and set deadlines that kept them on track. The Istituto Tecnico’s teacher (teaching both Class A and Class B) had a traditional teaching style but was open to trying new things and was happy to devote some of her school hours to the project. She did not interfere with the experimenter, and just observed.

Even though they had different teaching styles and approaches, all three teachers judged the workshop useful. The reasons behind their approval are obviously different. The Liceo Classico’s teacher liked the idea of “storyfing” grammar itself and considered it a useful aid. It was not only her opinion, since she already had a proof of that: between the second and the third meeting a couple of students told her that they had already used the proposed storification procedure to memorize a rule they were struggling with. The middle-school’s teacher focused on what she had gained from this experience: she got to know the students better, she acquired a new technique she could use in class, and she enhanced her digital literacy by learning about video editing software. The latter is a very important element since teachers’ low level of digital literacy is still a problem in Italy. This activity can provide teachers the opportunity to learn more.

Talking about the usefulness of the workshop for the students, the middle-school teacher said she noted a change in the attitude of the students towards English: after the workshop, they seemed to be more inclined towards English. This was a big result for this specific class, whose relationship with English was recognized as being difficult.

The teacher of the Istituto Tecnico judged the workshop useful, because it provided the students with an opportunity to revise grammatical contents and understand them better, and it did so in a playful way she really liked. This confirms that the workshop can fulfil the goal set for it when it was created. All three teachers would be willing to do the workshop again and stated they might use the storification procedure again in the future.

The Liceo Classico’s teacher said she had used stories in class before, inventing on the spot to help students understand. The workshop made her feel more confident with the idea of using them, because she had confirmation that there is a strong theoretical basis for using storytelling when teaching a language, and she gained knowledge of an extra tool to do it. For the students too it was an opportunity to understand that stories are not just for fun, but valuable learning tools.

The middle-school teacher said she would use the technique again, also with younger students, maybe using comics instead of video and with closer tutoring than for the older students. She would add

some meetings where they can experiment and learn how to use the technology while tutored, and then she would engage them in the storification of several grammar topics in addition to the usual program. Obviously, she would focus on key rules, or rules difficult for them.

The teacher at the Istituto Tecnico said she would like to do this activity again in class, maybe regularly, even if doing it regularly might decrease part of its appeal.

Another interesting thing she said is that, if she was to do the activity again and lead it, she would lack the competences about video making. She was not sure it would work. This reinforces the idea that this workshop can help not only the students but also the teachers to gain new digital skills, both by providing them with the information (if it is the experimenter who leads the workshop) but also giving them the motivation to update their knowledge.

Two more strengths were also mentioned. The Liceo Classico's teacher appreciated that the students had to work in small groups, because this trains them to cooperation, which is fundamental in our society. The middle-school teacher liked that it involved the use of technology the students are familiar with (they filmed and edited with their phones), and the fact that they also had to experiment researching independently on how to use new software.

Lack of time was mentioned as the main weakness by all three teachers. The workshop was designed with the aim of experimenting the procedure, therefore it was kept at a minimum, in order not to interfere with the school programs. However, if it was to be repeated, all three teachers expressed the desire to have more time, in order to let students absorb the information organically without rushing. Another element of disturbance was noted by the Liceo Classico's teacher. It has nothing to do with the workshop itself, but with the age of the students involved. She highlighted how, watching the final products, one has the impression the students were more concerned with how their classmates would see them than with the actual goal of the video. It was evident they were also somehow embarrassed, and rushed through things, without spending enough times on certain aspects of the message that were fundamental.

This observation highlights the need of close tutoring on part of the teacher to make sure the students are doing their best. It is not an impossible task, since she herself concluded that it was their first attempt and that, if they were to be asked to do it again, they would probably do it paying more attention and putting more care into it.

All three teachers highlighted a change in the attitude and the behaviour of their students, during, and sometimes after, the workshop.

The Liceo Classico's students were a well-behaved and responsible class, and their teacher expected them to follow and be active (even though obviously the students are all different, and some are more

willing than others). What she did not expect was for a group of particularly shy students to step out of their comfort zone and act in their video. She was very surprised and commented on how this kind of activity offered the students the opportunity to challenge themselves and show to the teachers a different side of them.

The middle-school teacher appreciated that the students realized it was a serious activity, that it was difficult and challenging for them, but playful and funny at the same time. The fact they knew they were being part of a university experiment, even if they had not clear what it meant, made them think they were part of something important. It was evident they were proud of their work and cared about doing things right. They wanted to make a good impression on their classmates, but not only: they were genuinely interested in the activity.

This teacher too was proud of the work of some of her students, whose video showed they had put extra effort in the task. She was pleasantly surprised to see the videos were good, even if obviously not professional. Many of the students too were proud of having completed the task. This led her to reiterate that it would help to have more time and offer the students a proper mini course on video making, to develop fully their potential. She also said that she reminded the students several times of the deadlines, and that without this type of control on part of the teacher some of them might not have handed in anything.

The teacher at the Istituto Tecnico was happy to see that all the students were active and gave a contribution, even those known for being shy or uninterested. She highlighted how there were several immigrant students who were still struggling with the language; since the final product was a video, they too could be involved in the activity and were able to give their contribution. Right before the third meeting, one of them told her that he too had contributed to the video and was very happy.

An extra element, that was remarked by the middle-school teacher, was the way of communicating of the experimenter. The teacher complimented her for her way of presenting the content and interacting with the students: she was enthusiastic, energetic and used many pop references they could recognize. This was something the teacher in the first field trial had also mentioned.

The middle-school teacher also said the material was clear, and at the same time enjoyable and engaging for the students because it included popular references that interested them.

6.4 Discussion

The workshop and the storification procedure were generally well received, and students declared they would use it again. Both the students' and the teachers' behaviour in class showed a positive attitude towards the workshop. The students were cooperative, engaged, and active, with few exceptions. There were some differences between the schools: the students at the Istituto Tecnico were more chaotic and noisy, and it was difficult to keep them in line, but this was due more to the enthusiasm for a non-formal, creative activity than to rebellious intentions; the students at the Liceo Classico were better behaved and performed well, even if they encountered more difficulties in finding ideas; the middle-school students were full of ideas and very enthusiastic about the activity, but they also needed closer guidance and constant reminder of what they were expected to do. All three teachers were cooperative and showed a positive attitude towards the experience. One of them, the middle-school teacher, was more anxious about it, but she had her reasons, which have nothing to do with the workshop itself. Actually, the workshop helped her improve the problematic situation with her class.

In this section we will review in detail the reactions of the students to both the workshop and the storification procedure (6.4.1). Students' reactions will be addressed in the order of preference, starting with their favourite activity, the screening of the videos, and ending with their least favourite (writing the screenplay). Data and implications for each of these activities will be discussed. Second, we will discuss the cognitive effects that the procedure application had on the student, to verify if and how it was useful (6.4.2). Finally, we will analyse their stories and their creative processes to get more information on how the application of the procedure works (6.4.3).

6.4.1 Reactions to workshop and storification procedure

According to the questionnaire, the activity the students liked the most was watching the videos, and their behaviour during that part of the workshop confirms it: during the screening, they were excited and proud of their work. This was the phase they were less active in the whole workshop, and it might seem unimportant, but it is not: most of the students enjoyed the opportunity of sharing their work with others, and this helped motivating them.

The final screening is an element to keep in the workshop, but without forgetting that almost a third of the students did not like this part. At their age students often feel shy and prefer to avoid exposing themselves to their peers. This does not mean it has to be avoided, but it is important to try and make

the experience as smooth as possible for everyone. This can be done by creating a safe space in the classroom, which is a constant commitment both teachers and students have to take. It is also a fundamental condition for a positive school experience, and the workshop can help work in that direction, since it was proved it can impact positively the students. For example, students known as “shy” decided to step out of their comfort zone and act in their video, surprising their teacher.

The students’ behaviour during the screenings and their answers in the questionnaires showed the students were supportive of each other: they highlighted the strengths of the other groups’ video, they applauded each other, they laughed, they made compliments. Seeing this kind of attitude is very encouraging: the students could have been mean, and criticize the others, and this might have resulted in some of them feeling insecure and maybe disliking the whole experience or the whole subject. This did not happen: both younger and older students proved to be supportive of their peers. Maybe they did it because they were afraid themselves of being criticized, or maybe they kept their criticisms for private conversations: some of them were clearly more worried about what the others would think of them than the message they were to deliver, but this is normal at their age. What is important is that they showed the foundations were good: there was mutual support, and that can be the starting base of a work that impacts not only their linguistic ability but also their personalities.

It is also interesting to note that few high-school students expressed a negative opinion on the screening, and those who disliked it the most were the middle-school students. This might be due to insecurity caused by their younger age, but it can also be due to the dynamics in that specific class: as we said, in the middle school the groups were designed by the teacher who wanted to mix students with different abilities. Some of these students might have ended up with a product they were not proud of because it was the result of an unwanted collaboration. This is an element to be taken into account, and which every teacher should consider when proposing this activity.

Going back to the questionnaire, the second activity the students liked the most was making the videos, with a significant difference between older and younger students: a clear majority of the high-school students said they enjoyed it, while only half of the middle school students said the same. It does not come as a surprise, then, that middle school students were those who struggled the most with this part, and a third of them judged it “fairly difficult”. This happened despite the fact that the explanation was understood by almost all the students, even if with some uncertainties.

The observations in class and that of the teachers tell us more and make clear that in all three schools the effort level was variable, and some groups put more energy into this than others.

The whole workshop required group effort, but the video production in particular, since it required students to meet outside school and actively do things like acting, shooting, editing. A lack of harmony in the group can be a recipe for disaster in this part of the work, and the middle-school students could have experienced exactly that.

If we look at the general situation, however, it is interesting to note that producing a video was a challenge for most of the students, regardless of their age or background. For most of them it was the first experience. They received some operational information in class, but they had to research the rest by themselves.

It is good to see that all the groups except two were able to produce a video, showing they could meet the challenge they were faced with. They had to use technology which is familiar (their phones) but in a new way, discovering new ways of expressions. Moreover, they experienced (and most of them for the first time) how it is to learn a skill referring to online resources (tutorials, wikis, ...). This is a fundamental skill for contemporary digital citizen, and something school should get them ready for. Producing a video for the first time had them understand all the work that goes behind it, and hopefully had made them more critical consumers of this product.

The third activity the students liked the most was inventing the story. High-school students liked it a little bit more than the middle-school students, maybe because they could rely on more previous knowledge and therefore enjoyed it more.

Observing the data, we see that in almost all the classes the students divided into three groups: the ones who found it easy, the ones who found it fairly easy, and those who found it difficult. Differently from what one would expect considering the results on what they liked, the ones who struggled the most were not the middle-school students but the ones at the Istituto Tecnico, while the students who struggled less were the ones at the Liceo Classico. The latter had group cooperation and a fair amount of knowledge on stories on their side. The middle-school students faced more difficulties but had imagination and creativity on their side. The Istituto Tecnico's students were faced with more challenges, but they were able to meet them: they all created a story, despite the fact their school might not have provided them with the same competence on literature that the students of the Liceo Classico had, and despite being older and likely far from the playful imagination of children. Moreover, even if it was difficult, they enjoyed the activity. This goes to show that storytelling is suitable for every age and background, and its implementation in education can provide great opportunities for learning.

With almost equal percentages, the fourth and fifth activity to be liked were that of transforming the linguistic elements into props, characters, settings, and that of creating an image representing the rule. It is interesting to note that the latter was liked consistently more by the students of the Liceo Classico (61%) than by the others (among 35-46%).

Both activities corresponded to the second step of the storification procedure, which half of the students said understood, while the other half said they had doubts about it.

This part of the procedure proved to be the most difficult for the students, and it is interesting to note that, even though things went slightly better at the Liceo Classico, there are no significant differences among the schools.

The process of finding a visual metaphor was challenging for many of the groups, as their stories and processes tell us (we will go back to this in 6.4.3).

The second and third step of the procedure rely heavily on the creativity of the students. Maybe this is why a big portion of the students said that they had doubts during the explanation of these parts (29% for Step 1, and 39% for Step 2).

The storification procedure tries to guide the students, but the directions it provides cannot be too strict, since it is designed to be applied to every abstract concept.

To help students overcome the obstacles they might encounter, it is essential the teacher is ready to tutor the students and follow them closely. S/He is the one with the extensive knowledge of the language and s/he can guide the students through it.

In the experiment students showed to rely also on another source for problem solving: their classmates. When in doubt, their classmates would be the first people to ask, followed by the experimenter. They were not afraid to ask for help and cooperated well.

This is a further element in support of group work, which is fundamental not only because they can help each other understand, but also because the creative process needs the energy of different points of view to overcome potential obstacles.

Going back to discussing the storification process as a whole, most of the students said that writing the moral (Step 1) was easy, while creating the ending image (Step 2) and then the story (Step 3) was considered doable but more difficult. These data match both the observations lead in class and those on the stories. The students acknowledged the activity as being difficult, but this is not necessarily negative. In fact, for all students (and with students of this age in particular) it is important to present activities that they can perform but that are challenging, so as to put into play their "zone of proximal development" (Vygotsky, 1978).

The same can be said about video making: most of the students said they found it easy, but they were also faced with challenges. This does not seem to be due to a lack of clarity in the explanation, since this part was judged the easiest to understand, and with similar proportions across all four classes. The problem here seems to be a lack of time and experience. Students realized that both planning, shooting and editing a video requires patience, precision, and time. They became more aware of what it takes to create a product they are used to consume without thinking of how it is made. This awareness can be the seed of a more critical attitude towards media, and it is a successful outcome. This workshop was experimental, and it is normal for the students involved to have doubts. As we said, education can and should challenge the students, if they are provided with the tools to fulfil the task and do not end up feeling defeated or other negative emotions.

Their answers to the questionnaire show us that this did not happen: they were “interested”, “inspired”, “amused”, “curious” but not “scared”. Their behaviour in class confirms it: they discussed among themselves, they asked questions, they also had fun and laughed (which is too often condemned as something to be done outside school, but actually is the foundation of durable learning).

Lastly, the activity that was liked less was writing the screenplay, despite being judged as easy by most of the students. This makes sense considering that this part was introduced by providing a big amount of information in a short time. Students were not given the opportunity to fully understand what a screenplay is for and the role it has in video making. This part should be granted more time, or removed from the workshop, even if this might result in lower quality videos.

6.4.2 Cognitive impact of the workshop

In relation to this workshop, the cognitive effects that need to be evaluated are those related to students’ understanding and remembering of the grammar content.

It was not possible to test students before and after the experience, therefore we can rely on their answers and the observation of their behaviour in class.

Most of the students reported that after the workshop their understanding and memory of the rule they had been working on had improved. One of them wrote “It was useful, and I think it is a good method to learn topics in a more understandable way⁵¹”.

⁵¹ “E’ stato utile e credo sia un buon metodo per imparare argomenti in modo più chiaro e anche divertente, che ci resta in mente per molto tempo.”

It is interesting to see that high-school students found the workshop useful more for remembering than for understanding, while middle-school students found it useful for both.

This mirrors their different statuses as language learners. The older ones had already encountered those rules, they felt they “knew them” but struggled remembering them; the workshop helped them settle that information in their minds, and meanwhile it also increased their understanding of it. For the younger students it was a process of exploration, that led them to reflect meta-linguistically; this resulted in understanding the rules better and consequently remembering better.

In the questionnaire after the activity ended, 76% of the students said that, if they had to recall the grammar rule, they would think of the story first and then the rule. They explained the story worked as a link, a bridge to the rule: the story is visual, and it allows students to rely on their visual memory to remember what the rules say. The prompt for the story was a moral they had to create, and in order to write it they needed to process the rule and really understand it; this activity itself was of great help for students. One might think applying the storification procedure in class requires too much time compared to the result (the story and/or the video); this was actually one of the critiques that emerged also on part of the students. What these critics do not see is that it is exactly the time spent on one single rule that makes that rule unforgettable for the students’ brain. Of course, it cannot be done for every single grammar rule of the book. This is why it should be a class or a school project, where each group contributes one story, and together they build a database. Moreover, what the students do when they create a story is not only that: they are engaging in a complex process of understanding, decoding, and re-coding: they start with the grammar rule in its textual form, they deconstruct it, then they transform it and code it into another language, the visual, and then in the language of narrative. It is a complex process whose cognitive effects do not end with the story or the video; it is the result of that specific process, but the real benefit is that the students get used to using their mind in a different way and gain a new perspective on language. They gain confidence in manipulating it, and this can constitute a huge advantage for them as language learners.

If we go into detail and analyse what the students had to say on the individual activities composing the storification procedure, we see that the activity of visualizing the linguistic element and that of inventing the story were judged more useful for both understanding and remembering than transforming the story into a video. We have seen the latter was the students’ favourite part, and one might think they would get blinded by its appeal. On the contrary, they were clear headed and understood that the first part was the one involving the most elaborating, processing, and therefore understanding. This is an important result, and a good premise for the storification procedure: it might

still need adjustment, but already as it is students perceive it as useful in facilitating the understanding of abstract content.

6.4.3 Analysis of the students' stories

The storification procedure intended to guide the students in the process, but it also left them room to be creative. Observing what they produced provides useful insights for improving the process itself. The technical quality of the works will not be judged, because it depends on the personal skills of the students and is anyway out of the aims of the activity. It is also linked to the effort the students put into it, and this has to do with their reaction (see Section 6.4.1). What will be taken into account is the content, the stories they produced.

The first element that emerges is that there was not much dissimilarity between the videos produced by the middle-school students and those of the high-school students, both in terms of video and story production. What the younger students lacked in knowledge and experience they made up for in creativity: ideas came easier to them, and they were less stressed about “getting it right” or about the others’ opinion, compared to older students.

The second element that emerges is that the stories produced by the students can be divided into two categories: stories that do not include a conflict, and stories that do.

The stories not featuring a conflict can be divided into two groups: stories telling how the elements get together, and stories narrating how the elements behave. The first group includes “The Question” (video 08), “Some & Any (Study buddies)” (video 09), “PPC Street” (video 12). The second group includes “Four brothers” (video 11), “Grammar Show” (video 17), “For Since (In the Old West)” (video 18), “Some Any” (video 22).

For the second category it is possible to identify four groups, depending on the type of conflict. The first group includes only one story, “Super -ing”, which unfortunately was not produced into a video. In this story the obstacle is represented by one element missing, in this case the ending -ing.

The second group includes the stories where all the components are present, but they are in the wrong order or combination. This is the case of “How much How many (The classroom)” (video 07) where professor How Many does not know how to deal with the Uncountable students while professor How Much does. It is also the case of “Music Contest” (video 01) where we see the wrong line-ups of musician failing at playing together, and “Friends” (video 15). These two are very rich, in characters (“Friends”) and combinations (“Music Contest”) and have been considered “confused” by the other students. This highlights a limit of this type of conflict: it cannot be reiterated many times, otherwise

it gets confusing. The stratagem of the wrong order works as long as it is done once (like in “The Classroom”) and then resolved.

The third group is made up by the stories whose conflict is generated by the interference of an external element; these are “Shopping at the supermarket” (video 06), “The -ing race” (video 04), “PP Friendzone” (video 13), “Present Continuous Crew” (video 16). Observing the choice of the interfering element, it seems consistent with a possible mistake for the first two videos, and arbitrary for the last two. This highlights the need of further indication from the procedure on this part.

Finally, the fourth group is that of stories telling of an element looking for its place, where the conflict consists in wrong interactions before finding the right one. This is the case of “Present Continuous (Puzzle Pieces)” (video 10) and “PS and PPS Story” (video 20).

It is interesting to note that these categories of stories include the conflicts suggested by the experimenter, but they also added new ones. The students autonomously expanded the narrative possibilities, showing that storytelling is really embedded in our culture and does not need teaching to be productive.

The categorization described leaves out “Present Perfect Continuous” (video 21). It might be included in the group of stories telling how the linguistic element came together, but it could also belong to the group featuring a conflict with an external element, since in the story each element is selected among two options.

The remaining three stories cannot be considered correct applications of the storification procedure for different reasons: “A few moments later” (video 03) and “Flat tyre” (video 05) because they simply contextualize the information, and “Three doors” (video 14) because it is a visual description but does not contain the essential narrative elements.

Another element of interest in the students’ stories is the characterization of the linguistic elements they operated. Most of the groups were able to produce a “storification”, but how did it go with this propaedeutic step?

It is possible to identify three types of characterizations. The first type consists in showing the name of the element to allow viewers to understand who is what; this has been done with name tags pinned on clothes (similarly to what the experimenter did for her Grammar Stories) or overlapping some text on the scene. This is the weakest type of characterization and the one most of the groups opted for.

The second type of characterization is the same as the first but adding a visual element of reinforcement to the character’s look. This is the case of “Music Contest” (video 01), where the girl playing Stop covers her face with a cardboard version of the road sign.

The third type is the most sophisticated and the most interesting, and consists in providing the character with behavioural or professional traits that are consistent with the element it refers to. Three videos have this feature. The first is “Four brothers” (video 11), where each verb is associated with a character whose profession or role can help the students remember the link. The second is “Friends” (video 15) where the look of the characters and their personalities are consistent with the context of use of the Future Tense they associate with (even though most of the links are weak). The third is “PPC Street” (video 12) where both the look and the attitude of the characters are used to reference the linguistic element. The latter is the most interesting example because the students were able to engage in metalinguistic reasoning on the role of the linguistic element, not only on its meaning: therefore, Subject is confident and the leader of the group, because it is the word that usually starts a sentence, while Been is shy and insecure, and needs the others’ company like the word does.

The analysis so far allows to identify three elements of criticality. The first is exemplified by the three stories who cannot be considered correct because they contextualize, rather than storify. It is not only a problem of these three groups, since many started their work contextualizing examples and needed to be corrected by the experimenter. The Grammar Stories themselves include stories where the character’s lines are example of its usage (for example, “Dancing”).

The experiment with the students allowed to understand that including examples of the usage is fine as long as it is a reinforcement of the information the story delivers and does not constitute its focus or its narrative line. Characterization and visual metaphor are the main aims of the procedure and cannot be neglected.

The second element of criticality consists in mixing different linguistic levels. Because the linguistic elements are almost always played by the students, the stories end up showing a one-word element, like an auxiliary, looking the same and acting on the same level as, for example, a verbal tense composed by auxiliary and past participle. This might cause confusion, because the viewers do not know if we are operating at sentence level or syntagm level. To avoid this, it is essential the students gain linguistic knowledge. This might be part of the workshop, or of normal class activity.

The workshop helped motivating the learners towards language and its mechanism, and it provided an opportunity to enhance their metalinguistic knowledge, which could be further developed.

This would require more time for the activity, which in this experiment was the third and most prominent element of criticality

Then there is a feature of the workshop that has been appreciated by teachers and students, but which was also the source of some problems: working in groups. Few of the students did not cooperate at all, while the majority were engaged in the activity. The problem is that a big portion did so

discontinuously, and this also lead to differences in contributing inside the group itself. The most collaborative were the Liceo Classico's students, followed by the two classes of the Istituto Tecnico. The class that mostly felt working in groups as a disadvantage was that of the middle-school students, and this might be due to their younger age, or to the fact they were not free to choose who they wanted to work with but were assigned by their teacher: the high-achieving students ended up doing all the work, while the weaker ones felt frustrated and excluded. However, a creative technique like this can only benefit from the cooperation of several minds. If group work is still problematic for many students, it does not mean it should be avoided, all the contrary: as auspicated by teachers and students, it should be proposed more often to provide students with opportunities to learn how to be cooperative.

In terms of benefits of the workshop, two interesting points emerge from the analysis of the stories and their production. The first is that the workshop motivated students that were generally considered to be problematic. In both classes, these students were among those who worked best, were engaged, pro-active and respectful of the instructions. They showed care and attention to details during all the process, including editing, and their products ended up being a better result than some of those belonging to more proficient students. In the comments, one student wrote "I think [the workshop] is useful to understand the rule even for people like me, who are absolutely not good at English (even when I study I get bad grades)⁵²." The workshop gives way to creativity and students who are considered not interested, not able to focus, get their chance to show skills and talents, that usually do not found space at school.

Another interesting benefit that was observed is that, because the final product is a video, also students of foreign origin who are still struggling with the language could take part to the activity and feel included. These students were very proud of their contribution and had the chance to connect with their classmates outside school.

⁵² Credo che sia un modo molto utile per capire le regole grammaticali per chi, come me, va da male in peggio in inglese (anche se studia prende sempre insufficiente).

6.5 Conclusion

The results of Experiment B are positive. Students and teachers judged the workshop as useful, and at the same time engaging and pleasant. It presented the students with some challenges they were able to meet without feeling scared or frustrated.

Even though it involved two different age levels and three different types of school, there were not significant differences in the results they produced. However, it must be said that the younger students were kept on track by the constant intervention of their teacher and received strong support from the experimenter. Their ability to work autonomously proved to be still in development. Their age level (13-14 years old) seem to be the limit for the application of this procedure: younger students are likely to lack the necessary metalinguistic knowledge and ability of reasoning required for this task. However, further research would be needed to verify if, with the support of proper tutoring, this activity could be proposed also to younger students.

The workshop highlighted the ability of the students to be supportive with each other, and their ability to overcome difficulties and face challenges: they might have struggled with some part of the storification procedure, but they did not give up and they ended up producing videos that were correct applications. For some of them this workshop meant getting out of their comfort zone and expose themselves in front of other people, for others it was an opportunity to show the talents they have and that the school usually ignores, for some it was an opportunity of inclusion. They learnt what it means to produce a video, and this is the seed to develop a critical sense towards this medium. All these things highlight how this workshop is not only a learning tool but can impact students as human beings.

As far as its two main goals are concerned (facilitating understanding and remembering of English grammar rules), the workshop was judged useful and effective. The application of the procedure was challenging, because it requires metalinguistic reasoning, cooperation, and creativity. It is a great opportunity for the students to become protagonist of their learning process, but it needs attentive tutoring from their teachers to go in the right direction.

The teachers were satisfied of the experience and said they would like to repeat it again. The only obstacle would be their lack of technical knowledge, but that can be easily overcome, since the technology implicated in this workshop is very basic. This could also constitute a motivation for the teachers to enhance their digital literacy.

The experiment also provided precious information on how stories can be structured: they can have no conflict and tell of how the elements met or narrate how they behave, or they can include conflict,

which can consist in a missing element, a wrong order, the interference of an external element, a misplaced elements looking for its place.

The fact that three groups produced video that turned out not to be really stories highlights once again the need of a tutor following the students and steering them in the right direction. Students should also be helped to avoid mixing levels (syntagm and sentence, for example), and more than anything they should be provided with more time to fully assimilate the content of the workshop.

Chapter 7.

CONCLUSION

This study showed that it is possible to design a procedure to transform abstract concepts (in this case, grammar rules) into stories, and one that can be applied by people of different ages and backgrounds. Moreover, it was highlighted that both active and passive use provide learners with benefits on a cognitive level.

Use of the Grammar Stories

In Experiment A, the Grammar Stories were praised for being simple, immediate, clear, and engaging. They were easy to understand because of the familiarity of their structure, but also because of the situations they presented: it was easy for the participants to understand what was happening in the stories since they have seen or lived similar situations before. Moreover, they appreciated the humour infused in all the stories, and the presence of live-actors. The latter made it possible for the viewers to engage with the characters and empathize with them.

The results of Experiment A confirmed that stories are a comprehensible input: all the participants correctly understood the narration in the Grammar Stories, and most of them were able to recognize their metaphorical meaning in relation to the grammar rules (also with the support of the contextual information provided). The obstacles encountered depended on a lack of linguistic and grammatical competence (e.g., not remembering the name of a specific verbal tense), rather than on the stories themselves. This problem can be overcome by adding to the stories suitable contextual information. In addition to supporting understanding, the Grammar Stories proved to enhance it in four cases out of six (4.3.4), the two left out being the two most basic rules, which participants said they had a clear understanding of already before. The impression of enhanced understanding was confirmed when the participants were asked about it in the follow-up questionnaire. This was a self-evaluation, which means that real understanding should be formally tested, but the fact that the majority of those learners stated they had a better understanding of the grammar rules after watching the stories is a very encouraging data for our storification procedure.

The Grammar Stories have proved effective also in supporting memory and recollection of abstract content (4.3.5). The majority of the participants were able to remind the stories they had watched, confirming that stories have the power to be a memorable input (as argued in 1.4). Moreover, they were able to recollect the grammar rules associated, and the majority of them did so by relying on

their visual memory of the story and its scenes. Only a smaller group (11%) recollected the textual explanation.

Some of the participants claimed tangible benefits in their English production, avoiding some mistakes thanks to their memory of the Grammar Stories. Even though we are talking of a small group of participants, this is an encouraging result, which suggests the Grammar Stories can be a real help for learners of English as a foreign language. This is especially true if we consider the participants were exposed to this input only once and tested after three weeks without any form of reinforcement in between.

The Grammar Stories were unanimously liked and appreciated. Participants also liked that each story focused on a specific mistake and rule, and that they constituted a fast and easy “fix” for their English. The container designed to access them was praised as well, because the complementary textual part provided all the information needed to fill possible gaps in the learner’s knowledge. This made the Grammar Stories a tool potentially usable by anyone, independently of their English level.

Some people expressed perplexity at the idea of using only the Grammar Stories to learn English, but this was not the project’s aim: the stories are not intended to be “lessons”, but a tool to help speakers of English as a foreign language improve their level.

The data collected in Experiment A also suggested possible improvements for the Grammar Stories and their website.

It was suggested to visually enhance the characterisation of the characters by using props, clothing, exaggerating their personalities’ traits, in order to highlight the significant parts of their behaviour. Stereotypes and exaggerations proved to help users’ understanding, being in the context of stories that are overtly non-naturalistic.

Future developments for the Grammar Stories should also include an experimentation on the narrative genres aimed to evaluate the effect of storifying the same rule to create stories belonging to different genres (comic, romantic, ...). It would be interesting to evaluate their efficacy in emotionally engaging learners, perhaps by verifying their effects in terms of “arousal level” according to the parameters of the Yerkes-Dodson law (Yerkes, Dodson, 1908).

Talking about the Grammar Stories’ website, several participants suggested that, after watching the video, the learners should be provided with the opportunity to practice the rule they have just learned/revised. This could be done by adding one or more interactive exercises (that could autocorrect and give feedback) and/or redirecting learners to external webpages with such exercises (like those of the British Council’s website, for example). The first would be preferable because the

exercises could be designed consistently with the rest of the learning material, but practicing on external material could also be a beneficial challenge since it would prove to the learners that what they have learnt with the Grammar Stories does not remain only in that “realm” but can be applied everywhere.

A second improvement to the website could be the introduction of a proficiency test to guide the users. Adult independent learners showed to be fairly able to judge whether a grammar rule is problematic for them or not, but their perception might be deceptive. In order to allow the users to get the maximum benefit from the Grammar Stories, it would be advantageous to introduce a test they could access before watching the videos, providing immediate feedback and suggesting which stories they need to watch on the basis of the mistakes they have made. A tool like this, however, implies a level of artificial intelligence for language analysis, and might not be completely reliable. Anyway, the users should always have the option to autonomously decide which stories they want to watch, in order for the Grammar Stories to continue to be a tool that can adapt to individual needs as much as possible.

Active application of the storification procedure

The results of Experiment B showed that the storification procedure designed is applicable by people of different ages and backgrounds, and that also its active use can lead to cognitive benefits.

The activity of storifying grammar rules was judged by the students as useful for both their understanding and remembering of the abstract contents. Further studies are needed, as this perception should be verified with formal testing, but the experiment produced some evidence of impacting the learners in several ways.

It was a challenging experience for them, but nonetheless they were able to handle it, producing meaningful stories and videos to narrate them. The difficulties encountered did not translate into negative feelings: on the contrary, the students were engaged, interested, curious, and also amused by the activity. For many of them the challenge contributed to their liking to take part in the workshop. Applying the storification procedure, visualising an image, reasoning on the abstract information in order to “translate” it into a story required the students to understand and process it deeply. For them this implied activating several cognitive strategies, like comparing, selecting, inferring, revising information (McDrury, Alterio, 2003). They actively constructed their knowledge of the subject by establishing connections, especially between pictorial and verbal representations. The result of this is meaningful learning, and not only of content knowledge: they were also involved in a process of

learning how to learn, by “objectifying in language or image what one has thought and then reconsidering it” (Bruner, 1986:129). The storification procedure appears therefore apt to influence not only the linguistic competence but also to the development of critical thinking.

All these cognitive benefits are supported also by the inclusion of video making in the workshop. Experiment B highlighted how it contributed not only by motivating the students with its intrinsic “coolness”, but also by forcing them to fully understand the content they aimed to share in order to manipulate it and operate a trans codification from textual to visual form.

Working in group made the operation even more challenging: they needed to create very specific images as result of an agreement between the visions of all members of the group. This implies they had to find ways to effectively communicate and discuss abstract contents, therefore putting into play metalinguistic reasoning.

Another important opportunity provided by the creation of videos during the workshop is that each group created a product that could be shown and shared. This has positive consequences both on the short and long term: on the short term, it triggers satisfaction and therefore motivates to repeat the activity, while also providing the teacher with an opportunity to engage them in a discussion on the linguistic contents; on the long term, it suggests the opportunity of creating a class database to be enriched by the students over the years, and which could constitute a useful learning tool for all students.

Video making also offers the students benefits on a personal level. First, it trains them to group work, a skill that turns out useful in many life situations. Second, it gives all students the opportunity to take part in the activity, even those who have difficulties with formal speaking and writing. Everyone’s talent can contribute to any part of the final product. All participants can express their personality and contribute with their abilities to the common benefit.

The storification procedure offers the students the opportunity of accessing the linguistic content while using their creativity and imagination.

The active application of the storification procedure positively conforms to the parameters described by Balboni (2007) for analysing teaching/learning techniques: it can improve the target linguistic ability (relevance); it triggers positive emotions (acceptability); it is doable with the given resources and time, although the latter would need to be longer than given in these experimentations (cost); it can adapt to different settings and situations (flexibility); it encourages group work (networking); it can adapt to different learning styles, intelligence types, and personalities (psychological

adaptability); it allows learners to work autonomously even though close tutoring is essential (autonomy); it includes the use of basic technology for video making (technology).

The storification procedure has been designed to provide the essential guidelines to realize the process of turning abstract content into stories, and it is meant to be applied to different types of abstract contents. Further research would be needed to evaluate its effectiveness in fields other than that of grammar rules.

Since it is not subject specific and the students who took part to the experiment judged its application doable but demanding, the assistance of a teacher is essential.

The teacher has to act like a mediator between the learning technique and the students, and intervene to adapt it to each specific class group. Therefore, in addition to the procedure itself, teachers need to be provided with suggestions on its application:

- In the experiment, students encountered difficulties in deconstructing the rule and then creating the visual and narrative metaphor. This part implies a level of metalinguistic reasoning they might need support with. To help them, in addition to the tutoring, the English teacher can decide to involve the student in a learning pathway specific on grammar and language analysis, in order to provide them with the necessary knowledge. This can be done before or in combination with the activity of storification.
- Students need to be guided through the creative process not to lose sight of the aim (conveying the linguistic information). It is necessary to regularly have them go back to the moral they decided and check if the story they are creating is consistent with it.
- The storification procedure appeals to the students' personalities and asks them to put their creativity into play. Therefore, it is necessary to create a connection with them, to let them know they can express their ideas, and also ensure that the workspace is a space where they feel supported. The storification procedure asks the students to brainstorm and invent. The teacher must be ready to support this way of proceeding, where mistakes are not stigmatized but acknowledged as part of the process.

Two other benefits for teachers can come from the active application of the storification procedure as class activity.

First, the foreign language teacher could decide to team with other teachers and make the storification activity a multidisciplinary one. It is an opportunity to intertwine different competencies, fostering cooperation among colleagues and providing teachers with the opportunity to learn from each other.

Teachers of literature and language can provide knowledge and tutoring both on linguistic and grammar aspects and on storytelling ones. Teachers of technical subjects can provide insights and tutoring related to the use of technology for video production, editing, digital drawing. Teachers of art subjects can contribute with their knowledge of composition, photography, visual narrative, visual metaphors, and allegory.

All the teachers involved in the experiment expressed a positive opinion about the workshop and said they would like to repeat it, but they also pointed out how they would lack some of the necessary competencies to realise the workshop as it was designed. A collaboration among colleagues would help to solve this problem.

However, since the technology required to make the videos is very simple, the storification activity could also constitute an opportunity for teachers to challenge themselves and enhance their digital skills. The positive feelings expressed by the teachers who took part in the experiment might fuel the motivation towards learning something new, that does not require expensive equipment. This way, the teachers themselves can benefit from such experience, not only their students.

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Annexes

EXPERIMENT A (website)

Appendix 1.1 – Story Questionnaire

Appendix 1.2 – General Questionnaire

Appendix 1.3 – Follow-up Questionnaire

Appendix 1.4 – Grammar Test

EXPERIMENT A (workshop)

Appendix 2.1 – Slides of the first meeting

Appendix 2.2 – Worksheet with rule, mistake, table to guide the procedure

Appendix 2.3 – Slides of the second meeting

Appendix 2.4 – Script Templates

Appendix 2.5 – Summary of terminology

Appendix 2.6 – Questionnaire for the students of the first exploratory trial

Appendix 2.7 – Questionnaire for the students of the Grammar Story workshop

Appendix 1.1 – Story Questionnaire

This questionnaire was created and distributed via Google Form.

The online version can be seen here: <https://goo.gl/forms/yRZAvWYtF6PMUIIt2>

1. **Per favore, scrivi un breve riassunto della storia che ti è appena stata raccontata. ***
2. **Se ripensi alla storia, qual è la prima cosa che ti viene in mente? Cosa ti è rimasto più impresso? ***
3. **Fra le seguenti descrizioni scegli quella corrispondente alla regola di cui hai appena visto la narrazione: ***

“To be forever alone”

- In inglese, l'ausiliare "To Be" e il Past Participle si combinano per creare il Present Perfect Simple.
- In inglese, l'ausiliare "To Have" e il Past Participle si combinano per creare il Present Perfect Simple.
- In inglese, gli ausiliari "To Have" e "To Be" si combinano con il Past Participle per creare il Present Perfect Simple.
- In inglese, la forma declinata di "To do" si combina con il Past Participle per creare il Present Perfect Simple.

“Speed Dating”

- In inglese, per declinare un verbo al Present Simple alla seconda singolare (You pl.) bisogna aggiungere -s alla forma base del verbo.
- In inglese, il verbo al Present Simple rimane sempre uguale, a prescindere dal suo soggetto.
- In inglese, per declinare un verbo al Present Simple alla terza singolare (He, She, It) bisogna aggiungere -s o -es alla forma base del verbo.
- In inglese, per declinare un verbo al Present Simple, nel caso il soggetto sia una delle tre persone del singolare (I, You, He/She/It), bisogna aggiungere -s alla forma base del verbo.

“Present Sisters”

- Quando si parla di un'azione in svolgimento e non di routine, in inglese bisogna usare la forma progressiva di presente, ovvero il Present Continuous.
- Quando si parla di un'azione in svolgimento e non di routine, in inglese bisogna usare la forma semplice di presente, ovvero il Present Simple.
- Quando si parla di un'azione in svolgimento e non di routine, in inglese è possibile usare sia il Present Simple che il Present Continuous basta specificare la durata.
- Quando si parla di un'azione in svolgimento e non di routine, in inglese bisogna usare la forma progressiva di presente, ovvero il Present Continuous, e specificare la durata nel tempo.

“Prepositions and Gerunds Ball”

- Se si usa un verbo dopo una preposizione, il verbo dev'essere un Infinitive.
- Se si usa un verbo dopo una preposizione, il verbo dev'essere un Gerund (forma -ing).
- Non è possibile usare un verbo dopo una preposizione.
- Se si usa un verbo dopo una preposizione, il verbo può essere un Gerund (forma -ing) oppure un Infinitive.

“Dancing”

- Per parlare di un'azione iniziata nel passato e durata per un certo tempo, si usa il Present Perfect Continuous e non si specifica mai la durata dell'azione.
- Per parlare di un'azione iniziata nel passato e durata per un certo tempo, si usa il Present Simple e si specifica la durata con le preposizioni For e Since.
- Quando si parla di un'azione iniziata nel passato e durata per un certo tempo, si usa qualunque Past Tense accompagnandolo alle preposizioni For e Since per specificare la durata dell'azione.
- Quando si parla di un'azione iniziata nel passato e durata per un certo tempo, si usa il Present Perfect Continuous e eventualmente le preposizioni For e Since per specificare la durata dell'azione.

“All by myself”

- L'interpretazione di "wash", "dress" e "wake up" dipende dalla presenza/assenza del complemento oggetto.
- Per rendere un verbo inglese riflessivo bisogna sempre mettere "myself".
- L'uso riflessivo dei verbi inglesi "wash", "dress" e "wake up" è determinato dal tipo di soggetto.
- I verbi inglesi "wake up", "wash" e "dress" possono essere usati solo in modo riflessivo.

4. E' stato difficile identificare l'opzione corretta?

Sì
No

Perchè?

5. Per quale motivo hai scelto questa storia? *

- a. Riguarda un'errore che mi rendo conto di fare
- b. Riguarda una regola che non conoscevo
- c. Pura curiosità
- d. Altro:

6. Se ti rendi conto di sbagliare questa regola, prova a valutare quanto spesso capita.

	Mai	Qualche volta	Spesso	Sempre	Non so
Quando parlo					
Quando scrivo					

7. Quanto sei d'accordo con le seguenti frasi? *

7.1 Ora che questa regola mi è stata raccontata in forma di storia, sento che ne ho una migliore comprensione.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

7.2 Ora che questa regola mi è stata raccontata in forma di storia, sento che la ricordo meglio.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

7.3 Penso che raccontare visivamente la regola la renda più comprensibile.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

7.4 Penso che la regola "storificata" in un video sia più comprensibile della spiegazione canonica in forma di testo.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

8. Ora che questa regola ti è stata raccontata in forma di storia, sapresti spiegarla a qualcun altro? *

Sì, e lo avrei saputo fare anche prima
Sì, e credo lo avrei saputo fare anche prima ma con meno sicurezza
Sì, e prima non avrei saputo farlo
Non so se avrei saputo farlo prima e non so se saprei farlo adesso
No, non avrei saputo farlo prima e non saprei farlo adesso

9. Mentre guardavi la storia come ti sentivi? * (Puoi selezionare più di un'opzione)

Divertito/a :D
Contento/a :)
Neutro/a :|
Distratto/a :/
Annoiato :(
Impaziente :\$
Altro:

10. Come giudichi il racconto in forma di storia di questa regola? *
(Puoi scegliere più di un'opzione.)

	Nuovo	Piacevole	Pertinente rispetto ai miei obiettivi e bisogni
Per niente d'accordo			
Poco d'accordo			
Indeciso/a			
D'accordo			
Molto d'accordo			

11. Quante descrizioni dei personaggi hai visualizzato? *

Tutte
Alcune
Nessuna

12. Cosa ti ha spinto a visualizzarle? * (Puoi selezionare più di un'opzione.)

Curiosità di vedere che cosa c'era scritto
Desiderio di verificare se quello che sapevo era corretto
Necessità di colmare una lacuna nella mia conoscenza
Altro:

13. Quando le hai visualizzate? *

Prima di guardare il video
Mentre guardavo il video
Dopo avere guardato il video
Altro:

14. Per la tua comprensione della storia, le descrizioni sono state ... *

indispensabili
utili
abbastanza utili
superflue (sapevo già)
inutili (non sapevo e le info non hanno aiutato)

15. Hai altri commenti riguardo le descrizioni?

16. La caratterizzazione dei personaggi perchè potessero rappresentare i corrispondenti elementi linguistici è stata ... *

Molto utile

Utile

Neutra (non ha fatto differenza / non l'ho notata)

Mi ha confuso

Mi ha confuso molto

17. Vuoi aggiungere qualcosa riguardo alla caratterizzazione dei personaggi?

18. Come giudichi il formato della storia (live action con attori in carne ed ossa) ? *

	Incisivo	Coinvolgente	Chiaro	Interessante	Piacevole
Per niente d'accordo					
Poco d'accordo					
Indeciso/a					
D'accordo					
Molto d'accordo					

19. C'è altro che vorresti aggiungere riguardo il formato della storia?

20. C'è qualcos'altro che pensi e che vorresti farmi sapere su questa storia?

Appendix 1.2 – General Questionnaire

This questionnaire was created and distributed via Google Form.

The online version can be seen here: <https://goo.gl/forms/auFhIGQZIV6FNImG3>

1. **Al momento, stai seguendo qualche corso di inglese? ***
2. **Pensa a come ti senti quando hai a che fare con la lingua inglese, e segna il valore con cui ti identifichi di più.** *Pensa solo alla lingua, quindi senza prendere in considerazione la cultura, la letteratura, eccetera.

	Mi sento molto in difficoltà	Mi sento in difficoltà	Neutro	Mi sento a mio agio	Mi sento molto a mio agio
Quando ho a che fare con la lingua inglese ...					
Quando parlo in inglese ...					
Quando scrivo in inglese ...					
Quando ascolto qualcosa in inglese ...					
Quando leggo qualcosa scritto in inglese ...					

3. **Nel complesso, la tua esperienza di studente di inglese è stata ... ***

Ottima
Molto buona
Buona
Discreta
Neutra
Negativa
Molto negativa
Pessima

Vuoi aggiungere qualcosa a riguardo?

4. **Come te la cavi con la visualizzazione di concetti astratti di solito? *** Capisci e ricordi con facilità anche concetti che non hanno "corpo", come formule matematiche, istruzioni, concetti filosofici ... ?
5. **Quali storie hai visto? *** Puoi segnare più di un'opzione.

FRAME	(All by) Myself
FRAME	Dancing
FRAME	Prepositions and Gerunds' Ball
FRAME	Present Sisters
FRAME	Speed Dating
FRAME	To Be Forever Alone

6. Avevi mai avuto esperienza di una regola grammaticale spiegata nella forma di una storia? *

Sì
No
Non so

Se sì, dimmi di più! Sono curiosa :)

7. Pensi che avere accesso a materiale di studio come quello che hai visto possa migliorare il tuo rapporto con la lingua? In che modo? *

8. Quanto sei d'accordo con le seguenti frasi? *

“La presentazione della regola grammaticale nella forma di una storia ...”

	Per niente d'accordo	Non d'accordo	Non so	D'accordo	Molto d'accordo
... facilita la comprensione della regola stessa					
... rende la regola facile da ricordare					
... è più efficace per la memorizzazione della regola, rispetto alla presentazione di essa in forma testuale					
... migliora la mia predisposizione nei confronti della lingua					

9. In generale, come giudichi i materiali che hai testato (le Grammar Stories con relative informazioni)? *

Molto positivamente
Positivamente
Abbastanza positivamente
Abbastanza negativamente
Negativamente
Molto negativamente
Non so

Se vuoi, puoi usare questo spazio per spiegare la tua risposta.

10. Come giudichi le Grammar Stories nello specifico?

Molto positivamente
Positivamente
Abbastanza positivamente
Abbastanza negativamente
Negativamente
Molto negativamente
Non so

Se vuoi, puoi usare questo spazio per spiegare la tua risposta.

11. Se pensi che le Grammar Stories siano d'aiuto con l'inglese, prova a spiegare in che modo *

12. Di solito se hai dubbi riguardo a una regola della lingua inglese, qual è la tua strategia per capire come usarla correttamente? *

13. Completa la frase con l'opzione che più si adatta a te: "Se questo progetto sperimentale si trasformasse in un sito permanente ..." *

... lo userei come prima strategia per controllare l'uso delle regole grammaticali quando ho dubbi

... lo userei come strumento per ripassare ma continuerei a usare la mia strategia

... non lo userei

Altro:

Se hai risposto "non lo userei", prova a spiegare perché.

14. Come si potrebbe migliorare il percorso di apprendimento? Che cosa avresti voluto che fosse fatto in modo diverso oppure che cosa manca? *

Appendix 1.3 – Follow-up Questionnaire

This questionnaire was created and distributed via Google Form.

The online version can be seen here: <https://goo.gl/forms/ZW9fJAZCcuCSZKgv1>

1. **Che cosa ricordi delle storie che hai visto? ***
2. **Senza andare a controllare da altre fonti e senza andare a rivedere le storie, prova a scrivere le regole di cui hai visto le storie, così come te le ricordi. ***
3. **Che cosa hai visualizzato nella mente o a che cosa hai pensato per rispondere alla domanda precedente? ***
4. **Ti è capitato di ripensare a una o più storie che avevi visto? Se sì, puoi spiegarmi quando è successo, cosa hai ricordato, e l'effetto che quell'informazione ha avuto su di te o su quello che stavi facendo? ***
5. **Pensa alle regole di cui hai visto la storia. Nel periodo fra la visione dei video e ora, quanto ti è capitato di usarle scorrettamente? ***

	Mai	Qualche volta	Spesso	Sempre	Non so
Quando parlo					
Quando scrivo					
Quando parlo					

Vuoi aggiungere qualcosa riguardo l'ultima domanda?

6. **Pensa a come ti senti quando hai a che fare con la lingua inglese, e segna il valore con cui ti identifichi di più. * Pensa solo alla lingua, quindi senza prendere in considerazione la cultura, la letteratura, eccetera.**

	Mi sento molto in difficoltà	Mi sento in difficoltà	Neutro	Mi sento a mio agio	Mi sento molto a mio agio
Quando ho a che fare con la lingua inglese ...					
Quando parlo in inglese ...					
Quando scrivo in inglese ...					
Quando ascolto qualcosa in inglese ...					
Quando leggo qualcosa scritto in inglese ...					

7. **Quanto sei d'accordo con le seguenti frasi? ***

7.1 Fruire delle Grammar Stories ha migliorato la mia produzione in inglese

Per niente d'accordo

Poco d'accordo

Indeciso/a

D'accordo

Molto d'accordo

7.2 Trasformare in storia le regole grammaticali migliora il mio atteggiamento verso la lingua straniera.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

7.3 Dopo avere fruito delle Grammar Stories, ho notato che la mia comprensione di quelle regole grammaticali era migliorata

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

7.4 Dopo avere fruito delle Grammar Stories, ho notato che mi ricordavo quelle regole grammaticali con più facilità.

Per niente d'accordo
Poco d'accordo
Indeciso/a
D'accordo
Molto d'accordo

8. Se hai commenti, puoi scriverli qui :)

Appendix 1.4 – Grammar Test

This test was created and administered via Google Form. Questions were shown in random order at each access.



For each sentence, the respondent had two options to click: “corretta” (correct) or “Altro” (Other) accompanied by a box where s/he was asked to type the correct version of the sentence in case s/he judged it as wrong.


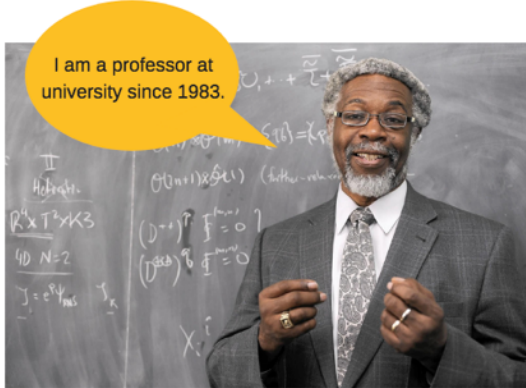
Here we present the content of the Grammar Test, which means the sentences we used with related images (when present), correct answers and grammar topics.

The online version as presented to the interviewees can be seen here:
<https://goo.gl/forms/k6bcqmgXsff4RJZc2>


SENTENCE	IMAGE	ANSWER
Grammar Story: “To be forever alone”		
<i>Today Carol has written thirty pages for her thesis.</i>	[no image]	CORRECT
<i>I have read all the books written by J.R.R. Tolkien.</i>	[no image]	CORRECT
<i>The price of oil is gone up.</i>	[no image]	WRONG Correct version: “The price of oil <i>has</i> gone up.”
<i>He is gone to the old office to take some papers he left there.</i>	[no image]	WRONG Correct version: “He <i>has</i> gone to the old office...”
Grammar Story: “Speed Dating”		
<i>Every time Taylor Swift releases a video all her fans go crazy and it dominates the charts.</i>	[no image]	CORRECT
<i>The Crick Crack Club in London produces storytelling shows, and it has been doing it for 30 years.</i>	[no image]	CORRECT

<i>In this movie the hero save the girl, and then the world.</i>	[no image]	WRONG Correct version: “..the hero saves the girl...”
<i>Audrey is a gifted ballerina: I always cry when she dance.</i>	[no image]	WRONG Correct version: “..when she dances.”
Grammar Story: “Present Sisters”		
<i>New message: Come to Coney Island! Beyonce is shooting a music video!</i> [image only]		CORRECT
<i>He gets ready to spend a lot of money every time he goes out shopping.</i>	[no image]	CORRECT
<i>He asks her to marry him.</i>		WRONG Correct version: “He <i>is asking</i> her to marry him.”


<p><i>You look worried. What do you read?</i></p> <p>[image only]</p>		<p>WRONG</p> <p>Correct version: "What <i>are</i> you <i>reading</i>?"</p>
Grammar Story: "Gerunds and Prepositions' Ball"		
<p><i>Kate is a real comedian! She told the joke without laughing!</i></p>	[no image]	CORRECT
<p><i>After having a shower, I waited for Steven.</i></p>	[no image]	CORRECT
<p><i>"Dear Harry, I can't wait to be in Hogwarts. I am looking forward to see you!"</i></p>	[no image]	<p>WRONG</p> <p>Correct version: "... I am waiting forward to <i>seeing</i> you!"</p>
<p><i>This medicine must be taken before go to bed in the evening.</i></p>	[no image]	<p>WRONG</p> <p>Correct version: "... before <i>going</i> to bed..."</p>
Grammar Story: "Dancing"		
<p><i>You're late. We have been waiting here for one hour!</i></p> <p>[image only]</p>		CORRECT

<p>Christina Aguilera has been performing since she was six, when she was discovered as a child star.</p>		<p>CORRECT</p>
<p>I am a professor at university since 1983.</p> <p>[image only]</p>		<p>WRONG</p> <p>Correct version: "I <i>have been</i> a professor at university since 1983."</p>
<p>After my mother died, I moved to my sister's house. I live here since ten years.</p>	<p>[no image]</p>	<p>WRONG</p> <p>Correct version: "... I <i>have been living</i> there for ten years."</p>
<p>Grammar Story: "All by myself"</p>		
<p>Tony is a perfectionist: he shaves every morning because he doesn't want an overgrown beard!</p>	<p>[no image]</p>	<p>CORRECT</p>
<p>I wake myself up at 6 every morning.</p>	<p>[no image]</p>	<p>WRONG</p> <p>Correct version: "... I <i>wake up</i> at 6 every morning."</p>
<p>This morning I went to the gym. Now I want to wash myself and have lunch.</p>	<p>[no image]</p>	<p>WRONG</p> <p>Correct version: "... I <i>want to wash</i> and have lunch."</p>


Appendix 2.1 – Slides of the first meeting

1. 


Laboratorio
GRAMMAR STORIES


Prima parte
2. 

Dottorato di ricerca

Università di Genova
3. 

Storytelling

Che cos'è?
4. 


che cos'è una
STORIA ?
5. 

Definizioni di STORIA

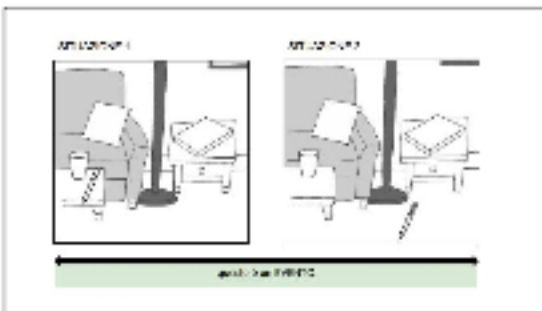
Università di Pavia

Un'idea di storia è un'idea che si evolve nel tempo e che si modifica nel tempo. È un'idea che si evolve nel tempo e che si modifica nel tempo. È un'idea che si evolve nel tempo e che si modifica nel tempo.


Definizione della NARRATOLOGIA

La Narratologia è una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi. È una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi. È una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi.
6. 


Definizione della NARRATOLOGIA

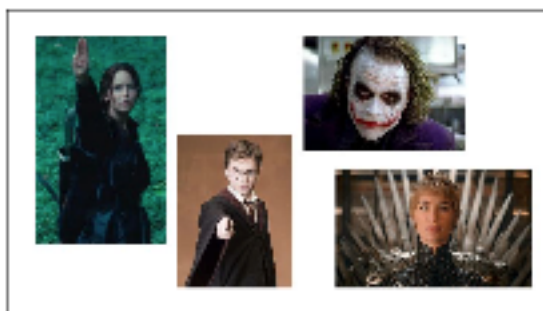
La Narratologia è una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi. È una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi. È una disciplina che si occupa di studiare la narrazione e di analizzare i suoi meccanismi.
7. 

ATTIVITÀ 1 **ATTIVITÀ 2**

questo è un PRODOTTO
8. 

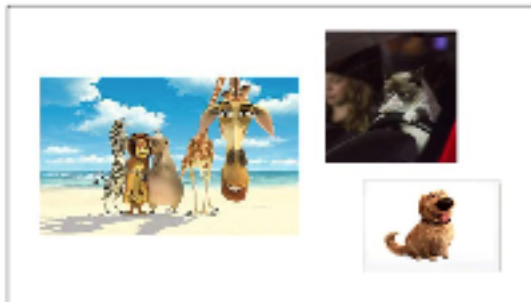
STORIA 1 **STORIA 2**

questo è un PRODOTTO
9. 

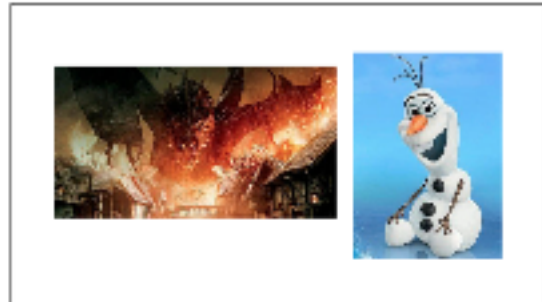
questo è un PRODOTTO
10. 

questo è un PRODOTTO

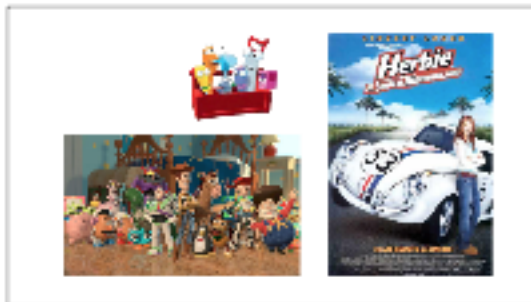
11.



12.



13.



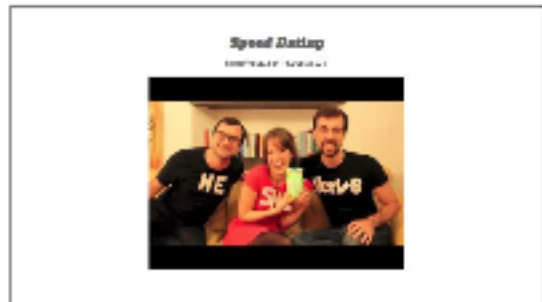
14.



15.



16.



17.



18.



19.



20.



invisible > visible

L'idea di Frege era che

© 2008 The Authors
Journal compilation © 2008 Blackwell Publishing Ltd

L'idea di "Mito"

4.1. Vectors and transformations

L'idea di Terzoculture

Un edificio unico per il Festival

13.

Structural load capacity of composite
girders reinforced with FRP
in a concentrated, flexure-shear region

21.



© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 105–112

22.

Liberate la fantasia!

Potete traduce cu orice dictionar online, in orice limba doriti

L'importante è che il significato fino a un certo punto lo veda.

23.



24.

Come costruire la storia



25.

Come costruire la storia

solo da regola.



La natura, l'aria,
il sole, la luna,
il vento, la pioggia,
il tuono, il fulmine,
il mare, il cielo,
il sole, la luna,
il vento, la pioggia,
il tuono, il fulmine,
il mare, il cielo,
il sole, la luna,
il vento, la pioggia,
il tuono, il fulmine,
il mare, il cielo,

3. **La soluzione** della legge di conservazione della massa è:

All other small mammals are
not included here.
They are listed below as
examples of the types
of animals that are

26.

Come costruire la storia

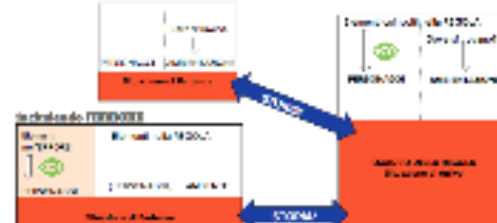
bioRxiv preprint doi: <https://doi.org/10.1101/201802>; this version posted February 20, 2018. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.



27.

Come costruire la storia - Riassunto

unche la regula



28.

Appendix 2.2 – Worksheet with rule, mistake, table to guide the procedure

RULE / MISTAKE 1

REGOLA nella grammatica inglese	ERRORE, ovvero che cosa fanno gli italiani
Present Simple, 3rd person singular: 3rd person singular + VERB + s oppure es	I madrelingua italiani tendono a dimenticare di aggiungere la -s al verbo. Dicono * <i>he go</i> invece di <i>he goes</i> Dicono * <i>she say</i> invece di <i>she says</i>

2	3	1
Situazione di Partenza Che cosa si vede in questa scena?	Storia passaggio dalla Sit. di Partenza alla Sit. di Arrivo	QUADRO DELLA REGOLA Situazione di arrivo Che cosa si vede in questa scena?


RULE/MISTAKE 2

REGOLA nella grammatica inglese	ERRORE degli italiani
<p>Past Simple - Come è fatto: With most verbs the past tense is formed by adding -ed: <i>call</i> >> <i>called</i> <i>like</i> >> <i>liked</i> <i>want</i> >> <i>wanted</i> <i>work</i> >> <i>worked</i></p> <p>But there are a lot of irregular past tenses in English: <i>be</i> >> <i>was / were</i> <i>begin</i> >> <i>begun</i> <i>break</i> >> <i>broke</i> etc ...</p> <p>Past Simple - Quando si usa: - To talk about something that happened once in the past: <i>I met my wife in 1983.</i> <i>We went to Spain for our holidays.</i> <i>They got home very late last night.</i> - To talk about something that happened again and again in the past: <i>When I was a boy I walked a mile to school every day.</i> - To talk about something that was true for some time in the past: <i>I lived abroad for ten years.</i> <i>She played a lot of tennis when she was younger.</i></p>	I madrelingua italiani tendono a usare il Present Simple oppure il Present Perfect (in qualche modo corrispondente al Passato Prossimo) invece del Simple Past.

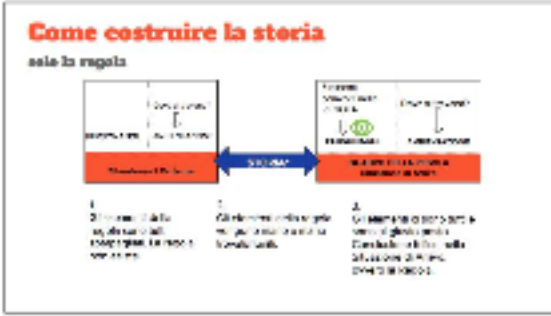
RULE/MISTAKE 3

REGOLA nella grammatica inglese	ERRORE degli italiani
<p>Present Perfect Continuous - Come è fatto: Ausiliare <i>Have / Has + Been + Verbo -ing</i></p> <p>Esempio: <i>I have been swimming (for ... / since ...)</i></p> <p>Present Perfect Continuous - Quando si usa: - usato per parlare di eventi che hanno una connessione con il presente; - pone focus su un'attività che non è conclusa; - accompagnato a <i>since</i> (a partire da ...) e <i>for</i> (per quanto tempo) viene usato per esprimere per parlare del periodo di tempo durante il quale una certa attività si è protratta; - solitamente usato per parlare di qualcosa di delimitato nel tempo o comunque temporaneo.</p>	<p>a) Gli italiani tendono ad usare il Present Tense (invece del Present Perfect Continuous) per comunicare per quanto tempo una certa cosa si è verificata. Per esempio dicono * <i>I live there since ten years</i> invece di <i>I have been living there for ten years</i></p> <p>b) Gli italiani a volte si confondono e usano <i>since</i> al posto di <i>for</i> e viceversa</p> <p>c) Gli italiani a volte inseriscono <i>It is..</i> e dicono * <i>It is three years that I learn English</i> pensando a quando in italiano dicono <i>Sono tre anni che studio l'inglese</i>. La forma corretta è <i>I have been learning/studying English for three years</i>.</p>

Appendix 2.3 – Slides of the second meeting

1. 


Laboratorio GRAMMAR STORIES

Seconda parte
2. 

Come costruire la storia

La regola


1. Introduzione
2. Sviluppo
3. Conclusione

1. Introduzione: Presentazione dei personaggi e del luogo.
2. Sviluppo: Descrizione delle azioni e dei dialoghi.
3. Conclusione: Risultato delle azioni e ritorno all'equilibrio.
3. 

Come costruire la storia

Includendo l'INTRODUZIONE


1. Introduzione
2. Sviluppo
3. Conclusione

1. Introduzione: Presentazione dei personaggi e del luogo.
2. Sviluppo: Descrizione delle azioni e dei dialoghi.
3. Conclusione: Risultato delle azioni e ritorno all'equilibrio.
4. 


Come costruire la storia - Riassunto

La regola

1. Introduzione
2. Sviluppo
3. Conclusione


1. Introduzione: Presentazione dei personaggi e del luogo.
2. Sviluppo: Descrizione delle azioni e dei dialoghi.
3. Conclusione: Risultato delle azioni e ritorno all'equilibrio.
5. 

Due possibilità


1. COPIA/STRUTTURATO
2. STORIA E LINGUA
3. VIDEO-RACCONTATO
6. 

Testo illustrato - Racconto


Testo illustrato - Soggetto

Breve racconto che illustra o spiega l'azione di un film, con gli eventi in ordine cronologico.
7. 


Come costruire la storia

1. **INTRODUZIONE**
Presentazione dei personaggi e del luogo e introduzione all'azione.
2. **INTRECCIO**
La storia si sviluppa, con i personaggi e le situazioni che si susseguono.
3. **FINALE**
La storia si conclude, con il risultato delle azioni e il ritorno all'equilibrio.
8. 

Testo illustrato - Consigli per il testo

1. Scegliere chiaramente delle immagini.
2. Non importa la lunghezza, ma la qualità.
3. Attenzione all'inglese.
9. 

Testo illustrato - Consigli per le immagini

1. **Momento importante**
Per la scelta dell'immagine, è importante che sia un momento importante della storia.
2. **Attenzione all'immagine**
L'immagine deve essere chiara e ben visibile.
3. **Decisione di gruppo**
La scelta dell'immagine deve essere decisa da tutto il gruppo.
10. 

Testo illustrato

BELLO E DIVERTENTE

11.

Testo illustrato - Illustrazioni digitali



sketch.ly/sketchpad/

Per maggiori informazioni visitate il sito web.

12.

Testo illustrato - Illustrazioni digitali



<http://www.quickly.com/>

Per maggiori informazioni visitate il sito web.

13.

Testo illustrato - Illustrazioni digitali



www.bandoa.com

Per maggiori informazioni visitate il sito web.

14.

Testo illustrato - Composizione



Per maggiori informazioni visitate il sito web.

15.

Testo illustrato - Composizione



Per maggiori informazioni visitate il sito web.

16.

Regola del Terzo



17.

Cortometraggio - Sceneggiatura

Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.

Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.

18.

Cortometraggio - Sceneggiatura tecnica

Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.

Scena	Descrizione	Tempo	Regia	Montaggio	Scenari
1	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
2	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
3	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
4	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
5	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
6	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
7	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
8	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
9	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15
10	Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.	15	15	15	15

19.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



campo (lungissimo) (CLL)

Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.

20.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



campo (lungo) (CL)

Il cortometraggio è un film di breve durata, generalmente inferiore ai 15 minuti, che può essere distribuito in sala o su video.

21.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



campo medio (CM)
Il campo medio è un piano di ripresa che mostra il personaggio e l'ambiente circostante in una inquadratura di medio formato.

22.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



totale (TOT)
Il totale è un piano di ripresa che mostra l'intero personaggio e l'ambiente circostante in una inquadratura di formato largo.

23.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



figura intera (FI)
Il piano figura intera è un piano di ripresa che mostra il personaggio intero e l'ambiente circostante in una inquadratura di formato largo.

24.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



piano americano (PA)
Il piano americano è un piano di ripresa che mostra il personaggio intero e l'ambiente circostante in una inquadratura di formato largo.

25.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



mezzo figura / piano medio (MF / PM)
Il mezzo figura è un piano di ripresa che mostra il personaggio da vita in su e l'ambiente circostante in una inquadratura di formato largo.

26.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



primo piano (PP)
Il primo piano è un piano di ripresa che mostra il personaggio da petto in su e l'ambiente circostante in una inquadratura di formato largo.

27.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



primissimo piano (PPP)
Il primissimo piano è un piano di ripresa che mostra il personaggio da naso in su e l'ambiente circostante in una inquadratura di formato largo.

28.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



particolare (Part.)
Il particolare è un piano di ripresa che mostra una parte del personaggio e l'ambiente circostante in una inquadratura di formato largo.

29.

Cortometraggio - Sceneggiatura tecnica

* Tipi di PIANO *



dettaglio (Det.)
Il dettaglio è un piano di ripresa che mostra un oggetto o una parte del personaggio in una inquadratura di formato largo.

30.

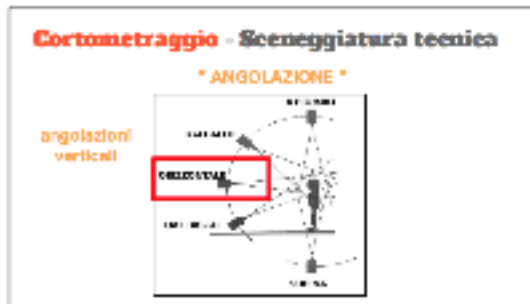
Cortometraggio - Sceneggiatura tecnica

* ANGOLAZIONE *

angolazioni orizzontali



31.



32.



33.



34.



35.



36.



37.



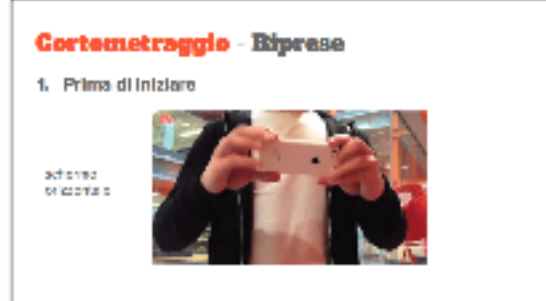
38.



39.



40.



41.

Cortometraggio - Riprese

1. Prima di iniziare

Essere in
la stanza a tutto



42.

Cortometraggio - Riprese

2. Luce (Exposure)

Impostare
l'illuminazione
proprio
per la scena

Non usare sempre la luce
della stanza per tutto



43.

Cortometraggio - Riprese

2. Luce

Attenzione alle ombre ...

... e al focus



44.

Cortometraggio - Riprese

3. Stabilizzare



45.

Cortometraggio - Riprese

3. Audio



46.

Cortometraggio - Montaggio



47.

Cose importanti da tenere a mente:

1. Prima di iniziare a girare il cortometraggio, devi avere un'idea chiara
piacevole. L'idea deve essere una regola generale, non una regola assoluta.



48.

Cose importanti da tenere a mente:

2. Prima di girare il cortometraggio, devi avere un'idea chiara
dell'immagine.



49.

Cose importanti da tenere a mente:

3. Prima di girare il cortometraggio, devi avere un'idea chiara
dell'immagine.



50.

Cose importanti da tenere a mente:

1. L'obiettivo del cortometraggio è quello di raccontare la storia di un
personaggio. Prima di girare il cortometraggio, devi avere un'idea chiara
dell'immagine.

2. Prima di girare il cortometraggio, devi avere un'idea chiara
dell'immagine.

3. Prima di girare il cortometraggio, devi avere un'idea chiara
dell'immagine.

Appendix 2.4 – Script Templates

1. The script template used in the first field trial

SCENA	N° Piano	Tipo di Piano	Angolaz.	Movimento di Camera	Immagine (cosa si vede)	Suono (Musica, Suoni ambiente...) Testo (battute)

2. The script template used during the Grammar Stories workshop

SCENEGGIATURA CON STORYBOARD

Cosa si vede: Descrizione di quello che si vede accadere in questa scena

Cosa si sente: **Suoni** (Musica, Suoni dell'ambiente...) e **Testo** (battute pronunciate, testo scritto che compare)

Solo per le riprese in live action:

N° Piano Numero corrispondente alla ripresa effettuata. Più scene possono appartenere alla stessa ripresa.

Tipo di Piano Vedi le Linee Guida

Angolazione Vedi le Linee Guida

Movimento camera Vedi le Linee Guida

TITOLO: _____

<p>SCENA n.</p> <div style="border: 1px solid black; height: 150px; width: 100%;"></div>	<p>Cosa si vede:</p> <p>Cosa si sente:</p> <p>N° Piano _____ Tipo di piano: _____</p> <p>Angolaz: _____ Mov. camera: _____</p>
---	--

Appendix 2.5 – Summary of terminology

Cortometraggio

LINEE GUIDA

Tipi di PIANO:



campo lunghissimo (CLL)



campo lungo (CL)



campo medio (CM)



totale (TOT)



figura intera (FI)



piano americano (PA)



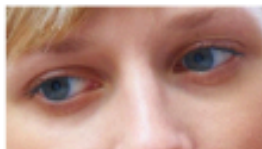
mezza figura / piano medio (MF / PM)



primo piano (PP)



primissimo piano (PPP)



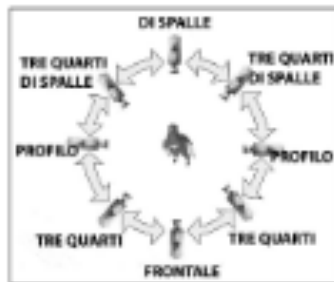
particolare (Part.)



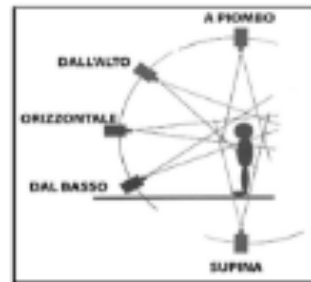
dettaglio (Dett.)

ANGOLAZIONE della camera:

angolazioni ORIZZONTALI



angolazioni VERTICALI



MOVIMENTO della camera:

PANORAMICA (PAN.)



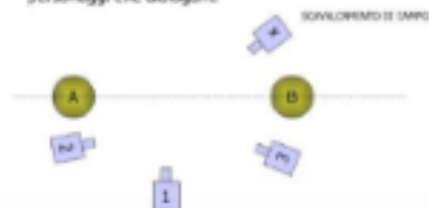
ZOOM IN / OUT



infine ... la regola FONDAMENTALE !

IL CAMPO E CONTROCAMPO

Montaggio che mostra alternativamente due personaggi che dialogano



Appendix 2.6 – Questionnaire for the students of the first exploratory trial

1. **Pensa al PRIMO incontro del laboratorio (lunedì). Segna tutte le parole che descrivono come ti sei sentito/a durante esso:**

interessato/a
 ispirato/a
 curioso/a
 divertito/a
 confuso/a
 annoiato/a
 ansioso/a
 impaurito/a
 Altro:

Se ti va, prova a spiegarmi perché secondo te ti sei sentito/a così.

2. **Pensa al SECONDO incontro del laboratorio (martedì). Segna tutte le parole che descrivono come ti sei sentito/a durante esso:**

interessato/a
 ispirato/a
 curioso/a
 divertito/a
 confuso/a
 annoiato/a
 ansioso/a
 impaurito/a
 Altro:

Se ti va, prova a spiegarmi perché secondo te ti sei sentito/a così.

3. **Valuta il tuo livello di comprensione dei seguenti argomenti durante le spiegazioni dell'insegnante del laboratorio:**

	Non ho capito niente	Ho capito alcune cose e altre no	Ho capito la maggior parte della spiegazione	Ho capito tutto	Non so cosa rispondere
... che cos'è una storia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... come creare una visualizzazione della regola grammaticale (Quadro della Regola)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... come creare una storia a partire dal Quadro della Regola	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... come creare un racconto illustrato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... come creare un cortometraggio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Leggi l'affermazione sulla sinistra e seleziona, fra le cinque opzioni, quella che più corrisponde a come ti senti tu in relazione a quell'affermazione.

	Per niente d'accordo	Poco d'accordo	Indeciso/a	D'accordo	Molto d'accordo
Dopo l'attività, sento che ho una migliore comprensione della regola su cui ho lavorato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dopo l'attività, sento che ricordo meglio la regola su cui ho lavorato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dopo l'attività, sento che ho una migliore comprensione della lingua inglese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mi piacerebbe fare ancora l'attività di trasformare regole grammaticali in storie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Il tempo previsto per ogni attività è stato sufficiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Se pensi che il tempo non sia stato sufficiente, per favore, spiega quali attività richiedono più tempo e quanto secondo te :

6. Pensa al prodotto finale che hai creato, e rispondi alle seguenti domande.

Sei soddisfatto/a del tuo prodotto?

Sì, molto

Sì

Nel complesso sì, ma ci sono delle cose non mi convincono

No

No, per niente

Se non sei soddisfatto/a, può spiegare perchè?

7. Era possibile scegliere di creare un cortometraggio, un racconto illustrato e eventualmente un video racconto. In base a cosa il tuo gruppo ha deciso quale opzione realizzare?

8. Per ogni affermazione, seleziona fra le opzioni quella che meglio ti rispecchia:

	Per niente d'accordo	Poco d'accordo	Indeciso/a	D'accordo	Molto d'accordo
Tutti i membri del mio gruppo hanno contribuito alla creazione del prodotto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I membri del mio gruppo hanno contribuito equamente alla creazione del prodotto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Il prodotto che il mio gruppo ha creato rende la regola più facile da CAPIRE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Il prodotto che il mio gruppo ha creato rende la regola più facile da RICORDARE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- 9. Se vuoi, qui puoi spiegare le tue risposte a quest'ultimo quesito:**
- 10. Durante la discussione finale, cosa hai pensato del tuo lavoro e di quello dei tuoi compagni?**
- 11. Quale parte del laboratorio ti è piaciuta di più? Perché?**
- 12. C'è qualcos'altro che vorresti dire su questo laboratorio? Questo è uno spazio libero per esprimere i tuoi pensieri.**

Appendix 2.7 – Questionnaire for the students of the Grammar Story workshop

1. Scrivi la morale della storia creata dal tuo gruppo.
2. Scrivi un riassunto della storia creata dal tuo gruppo.
3. Come vi è venuta l'idea della storia? E poi come l'avete sviluppata?
4. Oltre agli incontri in classe, che cosa avete fatto per portare avanti questo progetto? Quante volte vi siete incontrati per lavorarci e che cosa è successo durante questi incontri?
5. Valuta la tua comprensione delle istruzioni quando ti è stato chiesto di ...

	Non ho capito cosa dovevo fare	Ho capito cosa dovevo fare ma avevo dei dubbi	Ho capito cosa dovevo fare
... riassumere la regola in una frase, ovvero scrivere la "morale" della storia (Step 1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... creare la scena finale della storia, ovvero visualizzare la "morale" (Step 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
... creare il resto della storia (scena iniziale, svolgimento, eventualmente conflitto) (Step 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Se non avevi capito cosa dovevi fare o avevi dei dubbi, come hai affrontato il problema? Puoi selezionare più di un'opzione.

Ho chiesto ai miei compagni
Ho chiesto alla sperimentatrice
Ho osservato come lavoravano i miei compagni
Non ho risolto i miei dubbi
Altro:

7. Valuta come è stato per te fare le seguenti cose:

	Molto difficile	Difficile	Abbastanza difficile	Abbastanza facile	Facile	Molto facile
Riassumere la regola in una frase, ovvero scrivere la "morale" della storia (Step 1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trasformare gli elementi della regola in personaggi, props, ambientazioni caratterizzati in modo coerente	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creare la scena finale della storia, ovvero la visualizzazione della morale (Step 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creare il resto della storia (scena iniziale, svolgimento, eventualmente conflitto) (Step 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Se hai segnato alcune cose come difficili, spiega gli ostacoli che hai incontrato:

9. Valuta la tua comprensione delle seguenti spiegazioni fornite dalla sperimentatrice:

	Non ho capito niente	Ho capito una parte della spiegazione	Ho capito la maggior parte della spiegazione	Ho capito tutto
Spiegazione di come creare una sceneggiatura	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spiegazione di come girare un video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Se non avevi capito cosa dovevi fare o avevi dei dubbi, come hai affrontato il problema? Puoi selezionare più di un'opzione.

Ho chiesto ai miei compagni

Ho chiesto alla sperimentatrice

Ho osservato come lavoravano i miei compagni

Non ho risolto i miei dubbi

Altro:

11. Valuta come è stato per te fare le seguenti cose:

	Molto difficile	Difficile	Abbastanza difficile	Abbastanza facile	Facile	Molto facile
Scrivere una sceneggiatura	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Girare un video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Montare un video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Se hai segnato alcune cose come difficili, spiega gli ostacoli che hai incontrato:

13. Quali strumenti ha usato il tuo gruppo per creare il video? (riprese, montaggio, ecc...)

14. In relazione a ogni affermazione, seleziona l'opzione che ti rispecchia di più.

	Per niente d'accordo	Poco d'accordo	D'accordo	Molto d'accordo
Dopo l'attività, sento che ho una migliore comprensione della regola su cui ho lavorato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dopo l'attività, sento che ricordo meglio la regola su cui ho lavorato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dopo l'attività, sento che ho più dimestichezza con la lingua inglese	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Per ogni azione, valuta quanto ti ha aiutato a **COMPNDERE** la regola:

	Non mi ha aiutato per niente	Mi ha aiutato poco	Mi ha aiutato	Mi ha aiutato molto
Visualizzare personaggi, props, ambientazioni per rappresentare i vari elementi della regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inventare una storia per rappresentare la regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trasformare la storia scritta in una sceneggiatura e poi in un video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Per ogni azione, valuta quanto ti ha aiutato a RICORDARE la regola:

	Non mi ha aiutato per niente	Mi ha aiutato poco	Mi ha aiutato	Mi ha aiutato molto
Visualizzare personaggi, props, ambientazioni per rappresentare i vari elementi della regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inventare una storia per rappresentare la regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trasformare la storia scritta in una sceneggiatura e poi in un video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. Se pensi alla regola su cui hai lavorato cosa ti viene in mente, la storia che hai costruito o l'enunciato grammaticale (la spiegazione com'era nel libro)?

18. Valutazione del proprio prodotto

	Si, molto	Si	Non del tutto	No	No, per niente
Sei soddisfatto/a del video prodotto dal tuo gruppo?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. Motiva la tua risposta:

20. Lavoro di gruppo: Seleziona l'opzione che rispecchia la tua opinione.

	Per niente d'accordo	Poco d'accordo	D'accordo	Molto d'accordo
Tutti i membri del mio gruppo hanno contribuito alla creazione del prodotto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I membri del mio gruppo hanno contribuito equamente alla creazione del prodotto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Se vuoi, qui puoi spiegare le tue risposte a quest'ultimo quesito:

22. Come erano i video dei tuoi compagni, che hai visto durante l'ultimo incontro?

	Nessuno	Alcuni	La maggior parte	Tutti
Piacevoli da guardare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Specifica quali (non importa se non ricordi il titolo esatto)

24. Come erano i video dei tuoi compagni, che hai visto durante l'ultimo incontro?

	Nessuno	Alcuni	La maggior parte	Tutti
Efficaci nel passare l'informazione (la "morale")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Specifica quali (non importa se non ricordi il titolo esatto)

26. Dopo avere visto i video dei miei compagni mi rendo conto che ...

	Per niente d'accordo	Poco d'accordo	D'accordo	Molto d'accordo
Mi hanno permesso di capire meglio le regole grammaticali di cui trattano.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Se penso alle regole grammaticali trattate nei video, mi viene in mente la storia.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ricordare la storia del video mi aiuta a ricordare la regola collegata.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mi aiutano a ricordare le regole grammaticali di cui trattano.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. Hai altri commenti sui video dei tuoi compagni?

28. Se pensi a questo laboratorio, come diresti che ti sei sentito/a in generale? Puoi segnare quante opzioni vuoi.

interessato/a
 ispirato/a
 curioso/a
 divertito/a
 confuso/a
 annoiato/a
 ansioso/a
 impaurito/a
 Altro:

29. Se hai provato sentimenti negativi (noia, confusione, ansia, paura, ...) potresti dirmi quando è successo?

30. Valuta quanto ti sono piaciute le varie attività:

	Non mi è piaciuto per niente	Non mi è piaciuto	Mi è piaciuto poco	Mi è piaciuto abbastanza	Mi è piaciuto	Mi è piaciuto molto
Trasformare gli elementi grammaticali in personaggi, props, ambientazioni	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creare un'immagine per rappresentare visivamente la regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inventare una storia per rappresentare la regola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scrivere la sceneggiatura	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Girare il video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Montare il video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assistere alla proiezione del video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. Giudizi sul laboratorio

	Per niente d'accordo	Poco d'accordo	D'accordo	Molto d'accordo
Mi piacerebbe ripetere questo laboratorio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mi piacerebbe provare a usare ancora la tecnica per trasformare altre regole grammaticali in storie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32. C'è qualcos'altro che vorresti dire su questo laboratorio? Questo è uno spazio libero per esprimere i tuoi pensieri.

RIASSUNTO IN ITALIANO

Introduzione (Introduction)

Questa tesi propone una procedura per trasformare concetti astratti in storie e ne valuta la sua applicazione alle regole grammaticali dell'inglese in due contesti: quello della produzione di materiali accessibili online per l'autoapprendimento da parte di adulti di madrelingua italiana e quello dell'utilizzo come tecnica didattica. Questa tesi è anche il racconto dettagliato di un percorso di ricerca durato tre anni.

Capitolo 1. INQUADRAMENTO TEORICO (Chapter 1. THEORETICAL FRAMEWORK)

In questo capitolo vengono presentati gli studi e le posizioni teoriche che motivano la proposta presentata e che hanno fornito supporto per il suo sviluppo.

1.1 Il ruolo dello storytelling nella società umana (The role of storytelling in human society)

La narrazione di storie (*storytelling*) è sempre stata presente nella società umana. Nonostante le storie possano sembrare un bene superfluo, di semplice intrattenimento, e non una necessità, in realtà hanno giocato un ruolo fondamentale nell'evoluzione umana, permettendo la trasmissione della conoscenza nel tempo, l'educazione dei più giovani in preparazione alla vita, il rafforzamento e il mantenimento della cooperazione nei gruppi sociali di persone. L'importanza della narrazione è stata tale nel percorso evolutivo umano che il pensiero stesso si è strutturato sulla base di essa.

1.2 Struttura delle storie (Story structure)

Per poter capire appieno che cosa vogliamo dire quando diciamo che il pensiero umano si basa sulle storie, è importante capire come queste sono strutturate. Viene operata una distinzione fra i piani diversi ma complementari dell'*actual text* e del *virtual text*.

1.2.1 Actual text

Secondo la definizione di Bruner (1986), l'*actual text* è il testo fisico, composto dalla sequenza di parole sulla pagina. Il primo tentativo di descrivere la struttura delle storie sotto questo aspetto è di Aristotele, che parla di struttura tripartita: inizio, sviluppo, fine. Jonathan Gottschall (2012) parla di una "master's formula": Storia = Personaggio + Ostacolo + (Tentativi di) Risoluzione.

Vari studiosi hanno evidenziato come le storie di culture, luoghi, tempi diversi abbiano in realtà la

stessa struttura: Joseph Campbell nel 1949 parla di “viaggio dell’eroe”, similmente a quanto aveva fatto James Frazer nel 1915 parlando della presenza in tradizioni anche molto diverse di storie legate a un eroe che scende agli Inferi e torna vittorioso; Vladimir Propp nel 1946 compara centinaia di storie folk e ne estrae trentuno funzioni; Kurt Vonnegut nel 1947 scrive una tesi individuando sei archi narrativi con cui descrivere decine di storie tradizionali diverse.

Quello che tutte queste descrizioni hanno in comune è che individuano come elementi strutturali imprescindibili delle storie: una struttura tripartita (inizio, sviluppo, fine), spesso ciclica; la presenza di un conflitto, che innesca l’azione; la presenza di un protagonista che intraprende un “viaggio” in reazione a quel conflitto.

1.2.2 Virtual text

Le storie sono più di una serie di fatti (actual text, o *sjuzet*): ad essi si aggiunge il testo virtuale (*fabula*), che è il significato intrinseco della storia e che può cambiare da persona a persona. Leggere una storia significa anche co-crearne il significato (Barthes, 1974).

I personaggi non agiscono solo nel mondo reale, ma vivono anche un mondo interiore (*double landscape*). I due aspetti concorrono a creare un significato che va oltre le parole scritte o dette.

Considerando questo aspetto delle storie, è possibile individuare altre tre caratteristiche strutturali: le storie hanno un significato che emerge dall’insieme delle loro parti (non sono solo una cronaca di fatti); i personaggi sono mossi dall’intenzione; gli eventi sono collegati da causalità.

1.2.3 Descrizioni diverse, stesse caratteristiche (Different descriptions, same features)

In molti hanno provato a dare una definizione di “storia”, ma non c’è ancora accordo. Forse è preferibile individuarne, invece, delle caratteristiche specifiche. A questo scopo, è interessante notare come studiosi appartenenti a campi diversi abbiano finito per individuare le stesse: lo psicologo ed esperto di intelligenza artificiale James Wertsch (1998) parla di connessione fra gli eventi che non è semplice sequenza cronologica; di una struttura con un inizio, uno svolgimento, una fine; di una voce narrante identificabile. Il filosofo francese Paul Ricoeur (2005) parla di un “tutto” che acquista significato dall’insieme degli eventi che lo compongono, e lo stesso dice il teorico narrativista David Herman (2003).

1.3 Il pensare umano si basa sulle storie (Human thinking is story-based)

Il cervello umano è plastico e la costante esposizione alle storie ha fatto sì che si rimodellasse per essere predisposto ad esse. I bambini nascono con una naturale “fame di storie” che mantengono anche quando crescono. Questo implica che l’input più facile da processare per il cervello umano è quello in formato narrativo.

1.3.1 La nostra vita, la nostra storia (*Our life, our story*)

Fin da piccoli, pensiamo alla nostra vita in modo narrativo: essa è una storia di cui noi siamo sempre i protagonisti positivi. Questo ci permette di scendere a patti con la coscienza della nostra mortalità. Se non siamo in grado di attivare questo meccanismo, soffriamo perché ci rendiamo conto dell'inutilità della nostra esistenza. La psicoterapia lavora su questo, aiutando i pazienti a rielaborare ed eventualmente "ri-scrivere" parti della loro storia.

1.3.2 Elaborare informazione fornita in formato di storia (*Processing information in story form*)

Gli studi di Michael Gazzaniga (2000) sui pazienti split-brain hanno dimostrato che l'emisfero sinistro del nostro cervello ha la necessità di elaborare una spiegazione per tutto ciò che accade intorno a noi. Lo fa producendo ipotesi che possono avere il formato di storie. Gazzaniga chiama questo meccanismo "the interpreter", Gottschall "the storytelling mind", Bruner "the narrative mode". È un istinto naturale fondamentale per la nostra sopravvivenza perché ci permette di elaborare ed estrarre informazione anche quando l'input è incompleto. Poiché fin da piccoli ci vengono raccontate storie, assimiliamo la struttura narrativa e non solo siamo in grado di replicarla per applicarla all'input che riceviamo ma è quella che preferiamo.

La nostra capacità di vedere storie ovunque si basa anche sulla nostra tendenza naturale a vedere rapporti di causalità anche fra elementi apparentemente non collegati (come dimostrato dagli studi di Heider e Simmel, 1944) e sulla cosiddetta *theory of the mind*, ovvero la nostra tendenza ad attribuire emozioni e intenzioni umane anche a elementi non-umani (O'Neill, Shultis, 2007).

La nostra "storytelling mind" capisce qualcosa che è assoluto contestualizzandolo nell'esperienza individuale dei suoi protagonisti (umani o umanizzati). È il risultato dell'evoluzione naturale, un "equipaggiamento" di cui siamo dotati, estremamente radicato e che ci permette di condurre esistenze soddisfacenti anche in un mondo che ci fornisce informazioni spesso parziali.

1.4 Storytelling e memoria (*Storytelling and memory*)

Ci sono tre ragioni per affermare che un input in forma narrativa è più facile da processare di altri tipi di input. La prima è che la struttura delle storie è impressa e già interiorizzata nella nostra mente a causa della costante esposizione fin dall'infanzia, e quindi l'input in questo formato è facile da analizzare e assorbire per la memoria umana perché sa già i percorsi per analizzarlo e includerlo. La seconda ragione è che contengono informazioni multisensoriali, e poiché stimolano più sensi possono essere immagazzinate con multipli punti di accesso. La terza ragione è che generano emozioni e le tracce mnemoniche che sono investite di valore emotivo sono sempre più memorabili di quelle neutre.

1.5 Pensiero, memoria e immagini (Thinking, memory and images)

Poiché per la maggior parte della nostra evoluzione abbiamo dovuto fare affidamento sulla vista per garantire la nostra sopravvivenza, il nostro pensiero si è evoluto per manifestarsi in modo visivo nella nostra mente, così come la memoria. La memoria visiva è estremamente potente, ed è la preponderante per la maggior parte delle persone. Essa può anche essere ulteriormente potenziata con allenamento e tecniche specifiche, come fanno i “campioni di memoria” (*memory champions*) oppure gli storytellers performativi.

Le immagini mentali permettono di passare le informazioni da un dominio mentale a un altro (*trans-domain neural mapping*), quindi possono giocare un ruolo fondamentale nella memorizzazione dei concetti astratti.

Le storie quando vengono lette o ascoltate si traducono in immagini nella mente del fruitore. Poiché vari studi provano che è fondamentale riuscire a costruire un’immagine mentale, utilizzare le storie per facilitare questo processo e sfruttare la loro capacità di fornire un input sensorialmente ricco può costituire un punto di svolta per l’apprendimento dei concetti astratti.

Questo è ancora più vero oggi poiché la società umana occidentale è sempre più attratta, abituata, dipendente dalle immagini (video su YouTube, immagini sui social, ...).

1.6 Breve storia dello storytelling nell’educazione (Brief history of storytelling in education)

Storytelling ed educazione sono strettamente collegati fin dagli albori della civiltà umana, e lo sono tutt’oggi nelle culture orali che ancora sopravvivono.

La storia della narrazione come strumento educativo è connessa in particolare all’oralità, e quindi il declino di essa nella società ha decretato una perdita progressiva dell’abitudine di raccontare storie per educare, con l’eccezione della scuola primaria.

Negli anni Settanta la riscoperta dell’importanza della creatività nell’educazione ha fatto sì che anche la narrazione riconquistasse un ruolo importante, talvolta addirittura preponderante nelle proposte educative innovative dell’epoca. Un esempio è il lavoro di Kieran Egan, che auspicava il trattamento di ogni corso di apprendimento per trasformarlo in una storia.

Il crescente interesse nei confronti della narrazione in ambito educativo ha portato alla nascita del *narrative learning*, che consiste nell’usare con gli studenti narrazioni di ogni tipo (dalle storie inventate al racconto di esperienze personali) integrate in modo significativo con i loro obbiettivi educativi.

Come conseguenza alla diffusione delle nuove tecnologie, in parallelo è nato anche il Digital Storytelling, che condivide molti punti con il presente progetto ma nella cui cornice esso non si riconosce, a causa delle forti limitazioni in termine di contenuto e mezzi che il Digital Storytelling implica.

Un altro ambito degno di essere menzionato è quello dei *Narrative Learning Environments* (NLEs) che possono essere di tre tipi: *intelligent NLEs*, sviluppati nel contesto dell'Intelligenza Artificiale; *multimedia and narrative editor*, che permettono la manipolazione e creazione di storie in base a una guida; *home-made NLEs*, creati utilizzando tecnologia disponibile al grande pubblico.

1.7 Come lo storytelling facilita l'apprendimento (How storytelling facilitates learning)

Lo storytelling facilita l'apprendimento sotto vari aspetti diversi. Primo, perché aumenta la facilità di comprensione di un input, e lo fa in tre modi: fa leva sulla conoscenza pregressa della struttura nonché dei fatti narrati, permettendo la creazione di ipotesi che completano l'input stesso; permette di suddividere anche un input complesso in segmenti più piccoli e facilmente processabili (*chunking*); offre una ricchezza di stimoli multisensoriali. Il secondo aspetto che permette allo storytelling di facilitare l'apprendimento è la sua capacità di rendere l'input più significativo, sia nel contenuto che nella forma. Il terzo è che supporta la memorizzazione, perché coinvolge l'apprendente nella co-costruzione del significato, crea una rete di significati, garantisce multisensorialità all'input, lo carica dal punto di vista emotivo. Infine, genera motivazione in quanto rende intrinsecamente piacevole e significativo l'input.

1.8 I video nel contesto dell'educazione (Videos in the context of education)

I video sono usati a scopi educativi fin dalla loro comparsa sul mercato. Facendo un'analisi dei video prodotti a questo scopo oggi si notano due caratteristiche comuni: che la maggior parte di essi sono riprese a mezzo busto di un'insegnante che parla, e che gli studenti raramente sono coinvolti nel processo di produzione dei video.

1.8.1 Guardare video come attività d'apprendimento (Watching videos as learning activity)

È stato dimostrato che i video sono uno strumento didattico molto efficace. Nell'insegnamento delle lingue sono stati molto utilizzati, innanzitutto perché costituiscono un input multisensoriale e quindi che facilita la memorizzazione, ma anche perché permettono di "visitare" un paese e osservarne i meccanismi senza muoversi da casa.

1.8.2 Creare video come attività d'apprendimento (*Making videos as learning activity*)

È stato dimostrato che coinvolgere gli studenti nella creazione di video a scopo didattico facilita il loro apprendimento, ma studi di questo tipo sono ancora pochi. Le nuove tecnologie hanno aperto molte possibilità in questo ambito poiché hanno semplificato e reso accessibile a tutti i processi di creazione di video, ed è importante che venga esplorato.

1.9 Conclusioni (Conclusion)

Anche se non è possibile dare una definizione di storia e possibile identificarne delle caratteristiche strutturali specifiche. Lo storytelling ha giocato un ruolo importante nell'evoluzione umana tanto da dare forma al modo in cui le persone pensano. Per questa ragione è stato usato come strumento educativo per secoli. Le nuove tecnologie hanno aperto nuovi scenari.

Capitolo 2. SVILUPPO DELLA PROCEDURA DI STORIFICAZIONE (Chapter 2. DEVELOPMENT OF A STORIFICATION PROCEDURE)

Nonostante l'efficacia dell'utilizzo delle storie a scopi educativi sia provata ed esistano esempi di trasmissione di concetti astratti in formato narrativo a scopo educativo e narrativo, non è ancora stata sviluppata una formula riproducibile per farlo. Questo capitolo valuta alcuni esempi di quanto è stato fatto finora e avanza una proposta di processo di "storificazione".

2.1 Storie per veicolare contenuto non narrativo: Tentativi precedenti (Stories to deliver non-narrative content: Early attempts)

Vengono valutati alcuni esempi di strumenti narrativi applicati alla trasmissione di concetti astratti, prima nel campo della matematica e altre materie scientifiche, poi nel contesto dell'educazione linguistica.

2.1.1 Storytelling per la matematica e altre materie scientifiche (*Storytelling for Mathematics and other scientific subjects*)

L'informazione è ciò che si vuole comunicare, ma è la storia a dargli rilevanza. La matematica ha utilizzato le storie per incorniciare i problemi matematici fin dall'antichità (un esempio è l'antico "dilemma del fiume"), per calare l'astratto nel concreto e facilitare il ragionamento.

Per creare storie a partire dalla matematica, è possibile inventarsi i personaggi trasformando gli elementi matematici coinvolti, come faceva Rodari, o coinvolgere nello scenario personaggi popolari che gli studenti conoscono bene, come Harry Potter.

Inoltre, le storie possono permettere un contatto con la natura da un punto di vista inedito. Per esempio, per spiegare il ciclo dell'acqua si può decidere di trasformare una goccia d'acqua in un personaggio e raccontare il suo viaggio. È stato dimostrato che i bambini sono in grado di capire il significato che sta dietro metafore di questo genere, e quindi possiamo aspettarci che gli adulti non siano da meno.

Altri due casi di utilizzo di lessico legato al mondo dello storytelling nel contesto dell'educazione scientifica sono la *mathematical narrative* (Burton, 1999), che consiste nell'insegnare i concetti della matematica inquadrandoli nel loro contesto storico, e la *narrativization of science*, che consiste nell'avvalersi di strumenti tipici della retorica e della letteratura a vantaggio della divulgazione scientifica.

2.1.2 Storie nell'apprendimento linguistico (*Stories in Language Learning*)

Sono molto numerosi gli esempi di storie usate per contestualizzare, ma quelli non ci interessano. È molto difficile fare una lista completa di tutti i prodotti che presentano elementi o meccanismi linguistici in formato narrativo ma questi sono alcuni esempi individuati: una storiella in forma di filastrocca per spiegare l'origine dell'apostrofo tra gli articoli indeterminativi terminanti con vocale e i sostantivi femminili che iniziano con vocale in italiano; "The Secret Stories", una serie di materiali a pagamento che svelano le "storie segrete" alla base delle differenze fra versione scritta e pronunciata delle parole in inglese; il video "Silent E" da un programma per bambini americano, che racconta la storia della "e" muta alla fine di molte parole inglesi; il video Ted Ed "Comma Story", che spiega il funzionamento della Oxford Comma raccontando la storia della virgola come fosse una ragazzina; la serie di video "Nessy Reading Strategy" pensata per aiutare i bambini dislessici.

Questi esempi dimostrano che veicolare informazione linguistica astratta in modo narrativo è possibile; quello che manca è una "formula" riproducibile per farlo.

2.2 Sviluppo della Procedura di Storificazione (Development of the Storification Procedure)

La procedura qui proposta è stata sviluppata attraverso un processo che ha seguito i principi del Design Thinking, partendo da un problema e cercando di trovare una soluzione per esso.

2.2.1 Prima fase del processo di design: Identificare il problema, capire le necessità degli utenti, definire le risorse disponibili (*First phase of the design process: Identifying problem, users' needs, available resources*)

È stata condotta una ricerca preliminare in un gruppo di adulti italiani fra i 20 e i 35 anni che hanno studiato inglese a scuola ma erano coscienti di commettere ancora errori quando lo utilizzavano. È

stato evidenziato che il problema principale è la comunicazione orale: non si sentivano abbastanza forti e quindi la evitano o comunque provavano disagio. Queste persone erano alla ricerca di una soluzione veloce al loro problema.

Si è deciso di concentrare il lavoro sulla veicolazione efficace in chiave narrativa delle regole grammaticali difficoltose per gli italiani parlanti di inglese, in modo da fornire un “easy fix” e contribuire ad aumentare la sicurezza di questi parlanti nel confronto orale.

È stata anche condotta una ricerca per valutare gli strumenti che queste persone avrebbero a disposizione se cercassero risposte attraverso Google (la strategia nominata maggiormente). La risposta è che troverebbero video tutorial che sono repliche di lezioni frontali o materiale testuale simile a quello dei testi scolastici tradizionali. In entrambi i casi, si tratta di materiale poco efficace e non accattivante. I materiali a questo scopo pensati per i bambini sono di qualità superiore e piacevoli. Si è deciso che anche gli adulti meritano materiale piacevole e accattivante per sostenere la loro volontà di apprendimento indipendente.

2.2.2 Seconda fase: Brainstorming, idee, sviluppare e testare prototipi (*Second phase: Brainstorming ideas, developing and testing prototypes*)

Nella seconda fase di lavoro si sono fatti vari tentativi per mettere a punto una procedura che funzionasse. Ispirazione per questa parte è arrivata da Gianni Rodari e la sua descrizione dei meccanismi di “straniamento”, “associazione”, “metafora” in “La grammatica della fantasia”, e le tecniche di memorizzazione delle storie per immagini utilizzate dagli storyteller performativi contemporanei.

2.3 Descrizione della Procedura di Storificazione (*Description of the Storification Procedure*)

Dopo vari tentativi è stato possibile identificare una procedura che ha dimostrato di essere produttiva, e ne sono state create due versioni: una da applicare nel caso si decida di trasformare in storia solo la regola grammaticale, l'altra nel caso si decida di includere nell'operazione anche l'errore che comunemente si associa a quella regola.

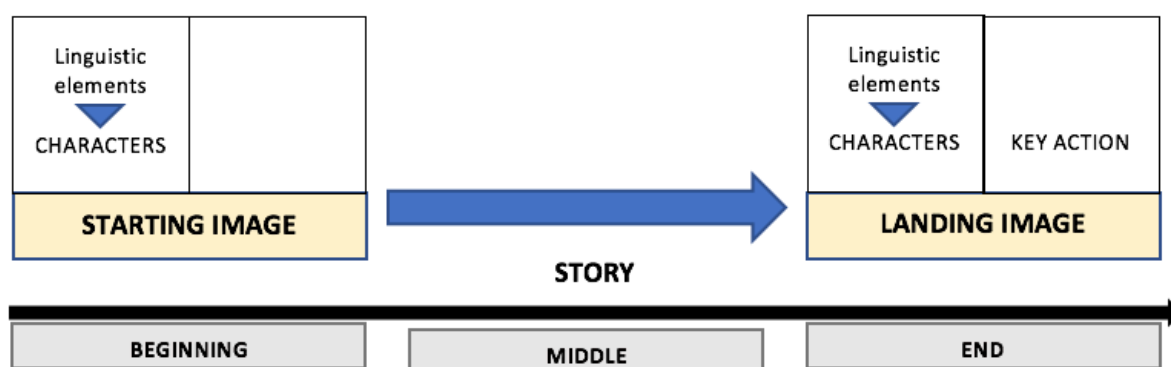
2.3.1 Regola grammaticale (*Grammar rule only*)

La procedura di storificazione di una regola grammaticale si compone di tre passaggi. Nel primo passaggio viene creata la *landing image*, ovvero la scena di arrivo. Si tratta di un'immagine statica che codifica la regola grammaticale in forma di metafora visuale. Si crea trasformandone gli elementi in personaggi, e identificando un'azione chiave che li lega e che definisce la relazione tra loro nella regola.

Il secondo passaggio consiste nella creazione della *starting image*, ovvero dell'immagine di partenza. In essa i personaggi sono già presenti ma non stanno compiendo l'azione chiave, e quindi la regola non esiste, c'è qualcosa che non va.

Il terzo passaggio consiste nell'inventare la storia che unisce le due immagini, ovvero il punto di inizio e il punto di fine.

Un esempio di questa procedura è la storia "Speed Dating" che storifica la regola dell'inglese secondo cui bisogna aggiungere un suffisso "-s" al verbo coniugato alla terza persona singolare del tempo indicativo presente. L'immagine finale è un ragazzo che incarna Verb+s in compagnia di una ragazza che incarna She, un ragazzo che è He, e un pupazzo che è It. La scena iniziale è Verb+s solo a una serata di speed dating. La storia ci mostra Verb+s mentre incontra i vari pronomi ma non riesce a stabilire con loro un dialogo, e si conclude con il suo incontro con She. Fra i due scatta l'affinità, e She presenta He e It a Verb+s. La loro unione costituisce il lieto fine della storia.



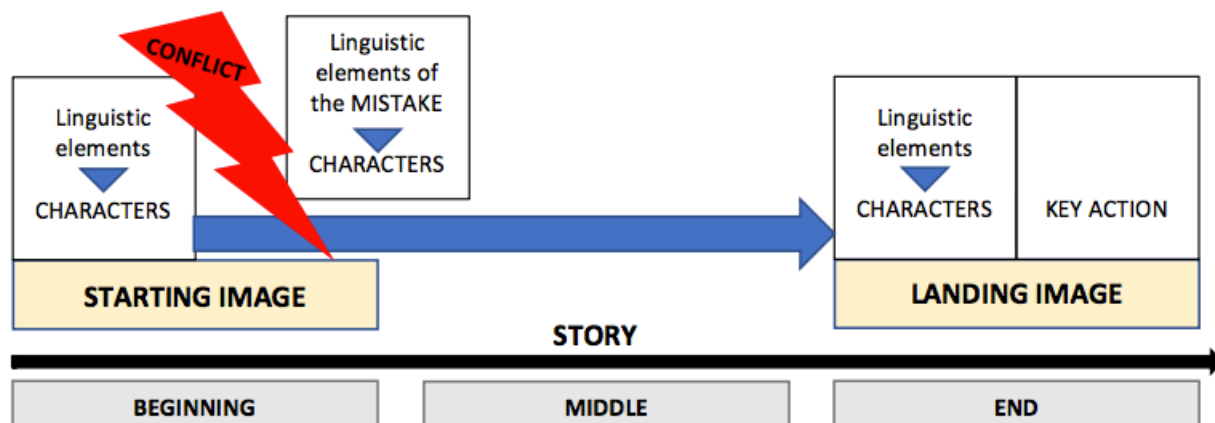
2.3.2 Regola grammaticale ed errore (Grammar rule and mistake)

La versione della procedura di storificazione che include l'errore funziona nel medesimo modo della precedente, ma con in più la creazione di personaggi che incarnano gli elementi linguistici dell'errore. Questi entrano in conflitto con gli elementi della regola (conflitto inteso come confronto da cui una sola parte esce vincitrice, non necessariamente come scontro), fornendo la scintilla per il racconto, che si conclude con la risoluzione di suddetto conflitto.

Un esempio di applicazione di questa procedura è la storia "To Be Forever Alone", che storifica la regola secondo cui per creare la forma attiva del Past Perfect si utilizza sempre l'ausiliare To Have seguito da un Past Participle. Gli italiani associano questo tempo verbale al Passato Prossimo italiano, che impiega sia l'ausiliare "avere" sia l'ausiliare "essere" in base al verbo, e quindi utilizzano anche "To be" facendo calchi dell'italiano.

In questa storia gli ausiliari To Be e To Have sono due ragazzi, amici, seduti a un bar. Il primo è

timido e riservato, il secondo estroverso e sicuro di sé. Arrivano due ragazze, che incarnano due Past Participle, che vengono subito notate da To Have. Il ragazzo convince l'amico ad andare a parlare alle due ragazze. To Be inizialmente fa resistenza ma poi si fa convincere. I due ragazzi e le due ragazze si ritrovano così seduti allo stesso tavolo, ma la storia finisce bene solo per uno di loro: To Have convince una Past Participle ad allontanarsi con lui per una passeggiata romantica, mentre To Be viene abbandonato dall'altra e rimane solo e triste al bar.



2.4 Discussione della procedura di storificazione nella sua cornice teorica (Theoretical discussion of the storification procedure)

Dopo la presentazione della procedura di storificazione, si è reputato importante condividere tre riflessioni. La prima precisa che l'approccio didattico nella cui cornice è stata sviluppata questa procedura è quello umanistico-affettivo di Paolo Balboni (2002), a sua volta alunno di Giovanni Freddi della scuola veneziana di didattica. La seconda sottolinea ancora una volta che, nonostante ci siano vari punti di contatto con il Digital Storytelling, questa procedura non intende inserirsi in quella cornice. La terza fornisce ulteriori prove a favore della storificazione dei concetti astratti: è stato infatti dimostrato che le storie rendono più efficace la condivisione di *tacit knowledge*; le regole grammaticali sono assimilabili alla *procedural knowledge* ma condividono con la *tacit* il fatto di non essere dichiarative, ed è quindi importante riuscire a codificarle per poterne permettere il recupero.

2.5 Conclusioni (Conclusion)

Le metafore permettono di arrivare alla conoscenza astratta partendo dal concreto, ed è questo meccanismo quello che viene sfruttato dalla procedura di storificazione proposta, con l'aggiunta della visualizzazione e dell'elemento narrativo per creare uno stimolo-storia efficace e memorabile.

Capitolo 3. PRESA DI POSIZIONE METODOLOGICA RIGUARDO L'APPRENDIMENTO LINGUISTICO E TESTING FRAMEWORK (Chapter 3. METHODOLOGICAL STANCE ON LANGUAGE LEARNING AND TESTING FRAMEWORK)

Questo capitolo è dedicato a specificare quali sono state le posizioni teoriche assunte in relazione all'apprendimento delle lingue, nonché ad illustrare il framework utilizzato per la sperimentazione della procedura di storificazione.

3.1 Linguaggio e apprendimento linguistico (Language and language learning)

Le due aree cerebrali tradizionalmente riconosciute come responsabili del linguaggio sono l'area di Broca (produzione) e Wernicke (comprensione). Gli studi degli ultimi anni hanno però evidenziato come l'elaborazione linguistica coinvolga non solo l'emisfero sinistro (dove si localizzano Broca e Wernicke) ma anche il destro. Sono stati formulati tre principi legati alla ricezione ed elaborazione dell'input molto importanti per ogni azione a obiettivo didattico: il principio di bimalità (entrambi gli emisferi processano l'input), quello di lateralizzazione (il destro processa in modo olistico e globale, il sinistro in modo analitico e razionale), e il principio di direzionalità (l'input viene prima processato dall'emisfero destro e poi da quello sinistro).

Per quanto riguarda l'apprendimento delle lingue, è anche stata riconosciuta l'esistenza di un cosiddetto "periodo critico" alla chiusura del quale l'acquisizione di una lingua non è più possibile, ma resta possibile il suo apprendimento. Se il contatto con una lingua seconda o straniera è costante e la motivazione è forte, possono anche verificarsi fenomeni di convergenza neuronale, in cui i sottosistemi di neuroni coinvolti nella comprensione e produzione della lingua diversa dalla lingua madre lentamente convergono verso le aree linguistiche primarie del cervello.

3.2 Approcci e teorie didattiche (Teaching approaches and theories)

I seguenti principi teorici dell'approccio umanistico affettivo hanno giocato un ruolo particolarmente importante nello sviluppo della procedura: focus sull'apprendente; inclusione delle ricerche delle neuroscienze relative ai meccanismi d'apprendimento dell'essere umano; importanza del generare emozioni positive. Viene specificato inoltre che la procedura vuole agire unicamente sulla competenza linguistica; non opera direttamente in funzione di quella comunicativa, ma intende farle da supporto.

L'approccio umanistico affettivo viene adottato anche nel concepire le regole come delle "regolarità" che si manifestano nella lingua, e alla cui scoperta l'apprendente deve essere

accompagnato.

La procedura di storificazione mira ad accompagnare l'apprendente nella costruzione del significato intrinseco della storia e quindi della regola, rendendolo attivo nel suo processo di scoperta del contenuto.

Una volta scoperta la regola, essa può essere interiorizzata, posseduta, e recuperata quando necessario. Se inizialmente ci sarà per l'apprendente la necessità di ricostruire ogni volta la regola per poterla recuperare, la pratica attiva della lingua farà sì che essa venga piano piano sostituita dall'automatismo. A quel punto la regola storificata avrà fatto il suo dovere e potrà rimanere nella mente ancora come aiuto mnemonico da usare in caso di necessità ma soprattutto come ricordo piacevole.

3.3 Applicazioni della procedura di storificazione (Applications of the storification procedure)

L'applicazione della procedura di storificazione può essere di due tipi (attiva o passiva) e su due livelli (input mentale o input multisensoriale). Se l'apprendente la applica attivamente e solo a livello mentale, la usa per creare una storia che gli faccia da ancora mnemonica quando necessario. Il caso dell'apprendente passivo e che si confronta con un input multisensoriale è quello preso in considerazione nell'esperimento A. Il caso dell'apprendente attivo e che crea un input multisensoriale è quello analizzato nell'esperimento B.

3.4 Metodologia della ricerca (Research Methodology)

Il metodo di ricerca scelto è un metodo misto, che include Trinagulation Design e Embedded Design (Creswell, Plano Clark, Gutmann, Hanson, 2003; Creswell, Plano Clark, 2007).

Capitolo 4. ESPERIMENTO A: il sito delle Grammar Stories (Chapter 4. EXPERIMENT A: Grammar Stories WEBSITE)

4.1 Obbiettivi (Goals)

Questo esperimento aveva l'obiettivo di valutare l'efficacia delle cosiddette Grammar Stories, ovvero delle storie ottenute applicando la procedura, poi trasformate in cortometraggi video.

4.2 Descrizione dell'esperimento (Description of the experiment)

4.2.1 Grammar Stories

Le Grammar Storie testate erano sei: “To Be Forever Alone”, “Speed Dating”, “Present Sisters”, “Gerunds and Prepositions”, “Dancing”, “All By Myself”. [Nella tesi ne viene fornita una descrizione dettagliata composta da formato, regola, errore, storia, link al video.]

4.2.2 Il sito (*The website*)

Per questa sperimentazione è stato creato un sito web ad hoc attraverso cui rendere disponibili le storie (che erano accompagnate da dell'informazione testuale che includeva descrizioni della regola, dell'errore, dei personaggi della storia) e somministrare i questionari.

4.2.3 Questionari (*Questionnaires*)

I questionari somministrati sono stati di tre tipi: questionario singolo per ogni storia, questionario generale da compilare dopo la prima visita al sito e dopo avere visto le storie, questionario di follow-up inviato dopo tre settimane dalla visione delle storie.

4.3 Presentazione e analisi dei dati raccolti (Data collected and analysis)

4.3.1 Partecipanti (*Participants*)

In tutto hanno partecipato all'esperimento quarantasei persone, la maggior parte fra i 20 e i 35 anni. Tutti avevano già avuto esperienze di studio dell'inglese e possedevano conoscenze pregresse della lingua. Tutti erano coscienti di commettere errori.

4.3.2 Embedded Experimentation: Interviste & Test grammaticale (*Embedded Experimentation: Interviews & Grammar Tests*)

Fra tutti i partecipanti, dieci hanno accettato di rispondere a delle domande aggiuntive sulla loro esperienza con le Grammar Stories e, prima e dopo la visione delle storie, sono stati sottoposti a un test aggiuntivo che testava la loro capacità di riconoscere gli errori comuni trattati in esse.

4.3.3 Giudizio complessivo (*Overall judgement*)

Come materiale di apprendimento, le Grammar Stories sono state giudicate positivamente da tutti i partecipanti alla sperimentazione. Sono stati identificati alcuni punti di forza.

Il primo è stato la capacità delle Grammar Stories di trasformare l'astratto in qualcosa di visibile, memorabile in quanto tale, ma anche di particolare impatto perché girato in *live action* e non realizzato in animazione.

Il secondo punto di forza è che le Grammar Stories sono state riconosciute capaci di generare coinvolgimento emotivo per il fatto di essere narrazioni in cui le persone possono identificarsi (in particolare perché girate con attori in carne ed ossa) e per il fatto di essere divertenti.

Il terzo punto di forza nominato è stato la loro chiarezza; il quarto la loro adattabilità a vari contesti; infine il quinto l'originalità.

4.3.4 L'effetto delle GS sulla comprensione delle regole grammaticali da parte dell'apprendente (*The effect of the GS on learners' understanding of the grammar rules*)

Le Grammar Storie hanno dimostrato di essere efficaci nell'aumentare la comprensibilità dell'input astratto. Questo in particolare grazie alla presenza di attori in carne e ossa, che lo rendono memorabile, e alle caratterizzazioni: maggiore la caratterizzazione degli elementi, più forte la traccia mnemonica. Il naturalismo non ha importanza, si può narrare per stereotipi perché non c'è pretesa di profondità psicologica. Le informazioni testuali fornite contestualmente sono state apprezzate perché permettevano di rientrare in possesso di una terminologia linguistica che spesso era rimasta fra i banchi di scuola.

4.3.5 L'effetto delle GS sulla memoria dell'apprendente e la sua capacità di applicazione delle regole grammaticali (*The effect of the GS on learners' memory and application of the grammar rules*)

Nonostante sia stato lasciato molto tempo fra il contatto con l'input e il follow-up (tre settimane e senza rinforzi), si sono notate ricadute positive sulla memorizzazione e ritenzione delle regole grammaticali trattate. Una parte dei partecipanti ha notato benefici tangibili sulla propria produzione, talvolta manifestatisi in effettive correzioni degli errori sulla base del ricordo delle Grammar Storie, altre nella forma di una maggiore attenzione nei confronti delle costruzioni critiche di cui prima erano inconsapevoli. Inoltre, è stato notato che i video si sono dimostrati più efficaci e memorabili delle immagini statiche e del testo.

4.3.6 Reazione alla modalità di presentazione delle Grammar Stories (*Reaction to the Grammar Stories' presentation form*)

Sono state fatte alcune osservazioni anche per quanto riguarda il sito creato per erogare le Grammar Stories: il fatto di lasciare all'utente la scelta della regola su cui lavorare si è dimostrata motivata e una giusta intuizione; il video in animazione è stato il meno gradito, mentre sono molto piaciuti quelli in live action, in particolare la loro componente umana; le informazioni testuali fornite contestualmente alla storia sono state giudicate positivamente e utili per comprendere le storie ma soprattutto per codificare con la giusta terminologia il loro contenuto.

4.4 Conclusione (Conclusion)

Le Grammar Stories hanno incontrato il favore degli utenti coinvolti nella sperimentazione. L'unica critica è stata mossa alla produzione non professionale, che però tutti hanno capito essere una

questione di necessità; è stata opinione comune che abbia comunque inficiato l'efficacia dei materiali.

Capitolo 5. ESPERIMENTO B: Prima prova sul campo del LABORATORIO (Chapter 5. EXPERIMENT B: First Field Trial of the WORKSHOP)

5.1 Obiettivi (Goals)

L'obiettivo di questa prima sperimentazione della procedura di storificazione come tecnica didattica da applicare a scuola è stata fatta con l'obiettivo di accertarsi che altre persone oltre alla sua creatrice potessero capirne i meccanismi e applicarla.

5.2 Descrizione dell'esperimento (Description of the experiment)

L'esperimento si è concretizzato in un laboratorio di tre giorni con gli studenti di un liceo classico.

5.2.1 Primo incontro (*First meeting*)

Durante il primo incontro, sono stati condivisi principi di base dello storytelling e della narratologia (personaggi, eventi, struttura tripartita), con riflessioni specifiche dedicate alle storie che narrano di cose astratte e condivisione di esempi video. Agli studenti è stato quindi spiegato il primo passaggio della procedura di storificazione; poi gli è stato chiesto di dividersi in gruppi e applicarlo.

5.2.2 Secondo incontro (*Second meeting*)

Agli studenti sono stati spiegati il secondo e il terzo passaggio della procedura. Poi gli sono stati fornite le indicazioni necessarie per trasformare la storia in un prodotto digitale. Gli studenti potevano scegliere di girare un video o creare una storia illustrata. Il tempo rimanente è stato dedicato al lavoro di gruppo, supportato dalla sperimentatrice.

5.2.3 Terzo incontro (*Third meeting*)

Studenti, insegnante e sperimentatrice hanno guardato e commentato le storie in classe.

5.3 Dati raccolti (Data collected)

5.3.1 Diario della sperimentatrice (*Experimenter's diary*)

La sperimentatrice ha tenuto un diario su quello che è accaduto durante gli incontri. Nonostante alcuni momenti di indisciplina, gli studenti hanno seguito con attenzione le spiegazioni e hanno portato a termine le attività richieste. La maggior parte di essi si è impegnata e ha contribuito al lavoro di gruppo.

5.3.2 Storie degli studenti (*Students' stories*)

Durante il laboratorio sono state create sei storie, una per ogni gruppo. [Nella tesi vengono fornite

descrizioni dettagliate che includono la regola storificata, il formato scelto, la storia, alcune note sul modo di lavorare del gruppo.]

5.3.3 Questionario (Questionnaire)

Alla fine del laboratorio agli studenti è stato chiesto di compilare un questionario che includeva quindici domande e indagava vari aspetti legati all'applicazione attiva della procedura.

5.3.4 Intervista alla professoressa (Professor's interview)

La professoressa di inglese della classe ha assistito al lavoro ed è stata intervistata per raccogliere le sue impressioni sulle attività del laboratorio. Il suo parere è stato positivo: ha ritenuto l'attività efficace perché rende i ragazzi attivi nel loro processo di apprendimento. L'unica critica è che avrebbe voluto ci fosse più tempo a disposizione.

5.4 Analisi e commento dei dati raccolti (Data analysis and comment)

5.4.1 Analisi delle storie degli studenti per valutare l'applicazione della procedura di storificazione (Analysis of the students' stories to evaluate the application of the storification procedure)

Ogni storia degli studenti è stata analizzata singolarmente per valutare la presenza o meno di quattro elementi chiave: la caratterizzazione, l'immagine iniziale, l'immagine finale, l'azione chiave e/o il conflitto. Cinque storie su cinque erano corrette applicazioni della procedura di storificazione. La sesta purtroppo non poteva essere considerata tale perché gli elementi linguistici erano stati visualizzati con oggetti a cui non era stata data agenzia, e quindi non potevano essere personaggi.

5.4.2 Valutazione delle ricadute cognitive dell'applicazione attiva della procedura (Evaluation of the cognitive effects of the active application of the procedure)

Gli studenti hanno giudicato l'applicazione della procedura di storificazione una tecnica efficace per il loro apprendimento. La maggior parte di loro ha concordato che operare la storificazione gli aveva permesso di capire la regola meglio e gli dava la sensazione di potersela ricordare con più facilità. Hanno trovato utile il fatto di visualizzare l'informazione e di manipolarla attivamente e con creatività.

5.4.3 Analisi delle reazioni degli studenti e valutazione del workshop (Analysis of the students' reaction and evaluation of the workshop)

Durante il laboratorio gli studenti erano coinvolti, motivati e hanno provato emozioni positive. Il contenuto delle spiegazioni preparate per il laboratorio è stato capito per la maggior parte, ma c'è margine di miglioramento. La modalità di lavoro in gruppo si è rivelata efficace e molto gradita. Gli studenti si sono dimostrati soddisfatti del loro lavoro e sostenitori di quello dei compagni.

5.5 Conclusione (Conclusion)

Questa prima sperimentazione ha innescato alcune riflessioni. Primo, nello spiegare la procedura agli studenti, si è dimostrato necessario sottolineare l'importanza della creazione di personaggi, coerenti con l'elemento che rappresentano. Secondo, le tempistiche andavano ripensate perché si è rivelato necessario avere più tempo per la produzione della storia e per la discussione finale. Infine, si è deciso di eliminare la possibilità per gli studenti di creare una storia illustrata e puntare tutto sul video.

Capitolo 6. ESPERIMENTO B: il LABORATORIO Grammar Stories (Chapter 6. EXPERIMENT B: Grammar Stories WORKSHOP)

6.1 Modifiche alla procedura di storificazione (Changes to the storification procedure)

La prima sperimentazione ha messo in luce la necessità di alcune modifiche, descritte nei successivi sei paragrafi.

6.1.1 Chiarire il messaggio: la morale (Clarifying the message: the moral)

Viene un nuovo primo passaggio (quindi da fare prima della creazione dell'immagine finale): la definizione di una "morale", di un messaggio che la storia deve passare. Questa può essere l'intera regola oppure una sua porzione. L'aggiunta di questo elemento punta a fornire un obiettivo chiaro che guidi la costruzione della storia.

6.1.2 Gli elementi astratti possono diventare personaggi, props, ambientazioni (Abstract elements can become characters, props, settings)

Gli elementi linguistici possono diventare non solo personaggi, ma anche props o ambientazioni. Le ultime due concretizzazioni vanno bene per gli elementi secondari, mentre quelli centrali devono comunque diventare personaggi per una corretta storificazione.

6.1.3 Nuove domande per guidare il brainstorming volto a creare la caratterizzazione (New questions guiding the brainstorming for characterization)

Vengono individuate delle nuove domande per guidare il gruppo nel brainstorming che ha lo scopo di creare la metafora visuale della regola e i personaggi che ne fanno parte.

6.1.4 Conflitto ma non errore comune (Conflict, but no common mistake)

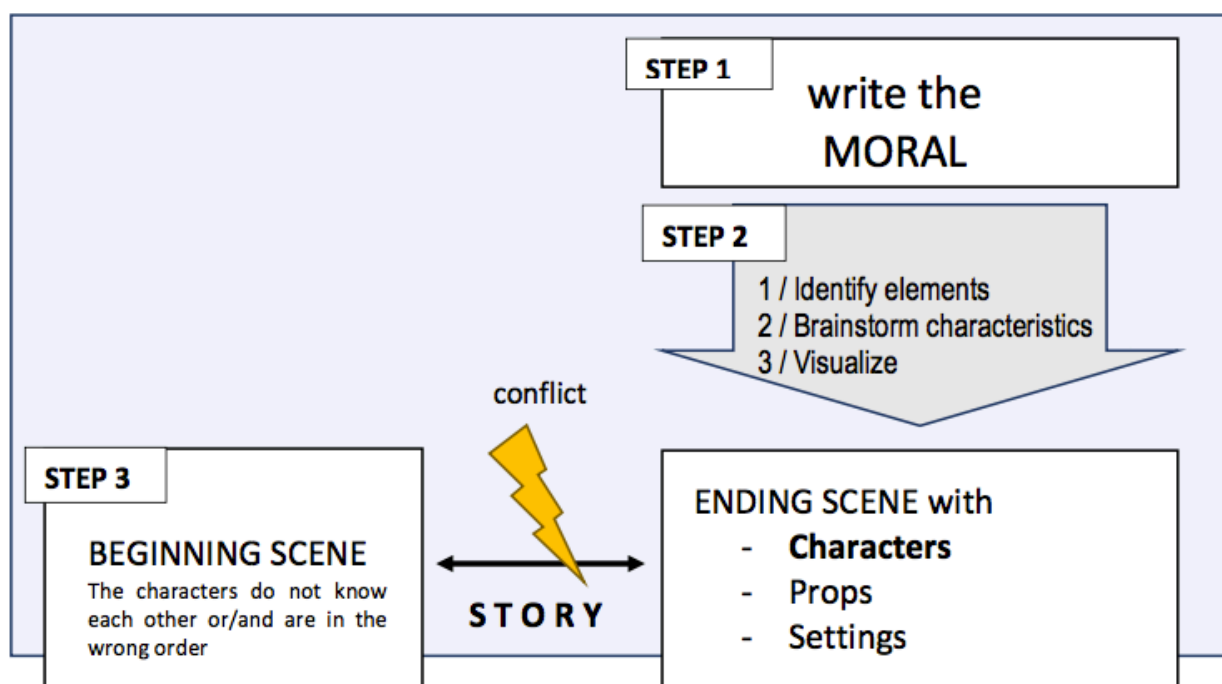
Viene suggerita la creazione di un conflitto, ma non è obbligatorio includere l'errore. Il conflitto può essere anche fra elementi della regola che per qualche motivo si trovano nella conformazione scorretta.

6.1.5 “Scena” al posto di “immagine” e un nuovo template per la sceneggiatura (“Scene” instead of “image”, and a new screenplay template)

La parola “immagine” per parlare di “immagine finale” e “immagine iniziale” viene sostituita dalla parola “scena”. Viene anche introdotto un nuovo template per scrivere la sceneggiatura, più semplice del precedente e che include uno spazio per disegnare uno storyboard.

6.1.6 Una versione semplificata della procedura di storificazione (A simplified scheme of the storification procedure)

La procedura di storificazione viene codificata in un nuovo schema semplificato.



6.2 Descrizione dell'esperimento (Description of the experiment)

L'esperimento ha avuto luogo in quattro classi di tre scuole diverse: una classe di terza media, una classe di studenti del secondo anno in un Liceo Classico, due classi di studenti del secondo anno in un Istituto Tecnico Commerciale. L'esperimento è stato condotto ancora una volta sotto forma di laboratorio, con tre incontri di due ore ciascuno nel caso della scuola media e dell'istituto tecnico, e con cinque incontri da un'ora ciascuno nel caso del liceo classico. La progettazione delle lezioni era per la maggior parte la stessa di quella usata per il precedente laboratorio, con alcune modifiche nella sequenza di presentazione delle informazioni.

6.3 Dati raccolti (Data collected)

6.3.1 Diario della sperimentatrice (Experimenter's diary)

Anche in questo caso la sperimentatrice ha tenuto un diario di ogni incontro, da cui emerge che gli studenti hanno accolto in maniera positiva l'attività. Gli studenti delle scuole medie hanno avuto alcune difficoltà con il lavoro di gruppo e la progettazione, ma hanno dimostrato grande fantasia. Gli studenti del liceo classico avevano maggiore padronanza delle nozioni relative alla narrazione e maggiore autonomia nell'organizzare il lavoro efficacemente, ma si sono talvolta bloccati per mancanza di idee. Gli studenti dell'istituto tecnico sono stati i più difficili da controllare dal punto di vista disciplinare, ma anche i più appassionati nel portare avanti l'attività, con risultati spesso sorprendenti anche per loro stessi.

6.3.2 Storie degli studenti (Students' stories)

Gli studenti hanno prodotto in tutto ventidue storie. [Nella tesi vengono presentate in dettaglio e per ognuna vengono fornite formato, morale, riassunto della storia, note su come ha lavorato il gruppo.]

6.3.3 Questionario (Questionnaire)

Alla fine del laboratorio agli studenti è stato chiesto di compilare un questionario che comprendeva trentadue domande e che valutava l'applicazione della procedura, la sua efficacia, il laboratorio stesso.

6.3.4 Interviste alle insegnanti (Teachers' interviews)

Al termine del laboratorio le tre insegnanti coinvolte sono state intervistate. Tutte hanno espresso parere positivo sul laboratorio, perché coinvolge gli studenti, fornisce loro strumenti di apprendimento ma anche di espressione, apre nuove possibilità di apprendimento anche per l'insegnante. Tutte hanno espresso il desiderio di avere più tempo per questa attività nonché l'intenzione di ripeterlo nel futuro.

6.4 Discussione (Discussion)

Questa sezione contiene un'analisi e discussione dei dati raccolti in relazione agli obiettivi definiti per la sperimentazione.

6.4.1 Reazioni al laboratorio e alla procedura di storificazione (Reactions to workshop and storification procedure)

Gli studenti hanno accolto positivamente il laboratorio, e hanno dimostrato di capire l'importanza dell'applicazione della procedura e della realizzazione del video per l'attività. Ci sono state differenze nel gradimento relativo alle singole attività, talvolta dettate dall'età degli studenti (per esempio, per i più giovani guardare il proprio video insieme a quelli degli altri è stato più imbarazzante che per gli

studenti più grandi). È stato interessante notare come la creazione del video sia stata considerata una sfida da tutti, a prescindere dall'età, ma come questa non si sia tramutata in frustrazione ma in occasione di superare un proprio limite.

6.4.2 Impatto cognitivo del laboratorio (*Cognitive impact of the workshop*)

Anche in questo caso le reazioni degli studenti sono state positive, e la grande maggioranza ha reputato che l'attività di storificazione li abbia aiutati sia a comprendere meglio sia a memorizzare la regola grammaticale su cui avevano lavorato. E' interessante notare che gli studenti delle superiori hanno reputato il laboratorio più efficace per la memorizzazione rispetto alla comprensione, mentre per gli studenti delle medie è stato il contrario. Questo riflette il loro diverso posizionamento nel percorso di apprendimento.

La maggior parte degli studenti ha detto che se ripensano alla regola gli è più facile ricordarla nel suo formato di storia rispetto a quello tradizionale del testo scolastico, e si sono dimostrati capaci di codificare e ricodificare le narrazioni per estrarne il significato. Questa operazione non è banale e apre scenari promettenti per l'insegnamento dei concetti astratti.

6.4.3 Analisi delle storie degli studenti (*Analysis of the students' stories*)

Dall'analisi delle storie degli studenti sono emerse alcune riflessioni. La prima è che non c'era evidente differenza fra i prodotti degli studenti delle medie e quelli delle superiori. La seconda è che le storie potevano essere divise in due grandi categorie: quelle che includevano conflitto e quelle che non lo includevano. Queste ultime potevano a loro volta essere divise in due sottogruppi: storie che raccontano come gli elementi sono finiti insieme e storie che raccontano come gli elementi si comportano. Per le storie che includono conflitto, era invece possibile individuare quattro sottogruppi: nel primo il conflitto è rappresentato da un elemento che manca, nel secondo dal fatto che i componenti della regola ci sono tutti ma sono nell'ordine sbagliato, nel terzo è generato dall'interferenza di un elemento esterno, nel quarto è rappresentato dalle interazioni "errate" che un elemento ha mentre cerca il proprio posto.

Delle ventidue storie create solo tre non potevano essere considerate corrette applicazioni della procedura di storificazione: due perché semplicemente contestualizzavano l'informazione, non la storificavano; una perché era una descrizione visuale ma non includeva narrazione.

Anche per la caratterizzazione è possibile identificare tre tipi, che sono progressivamente più efficaci: nel primo viene solo mostrato il nome dell'elemento, nel secondo al nome viene associato un elemento distintivo, nel terzo l'intero aspetto del personaggio e/o la sua personalità rappresenta in modo metaforico l'elemento a cui è associato.

Sono anche emerse delle criticità: la prima è rappresentata dalle storie che non erano corrette

applicazioni e che suggeriscono ci sia ancora necessità di migliorare il modo in cui la procedura viene comunicata; il secondo consiste nel mescolare livelli linguistici diversi, cosa che può generare confusione.

6.5 Conclusione (Conclusion)

Il laboratorio è stato considerato utile ed efficace sia dagli studenti che dagli insegnanti. I video prodotti testimoniano questo, oltre a confermare l'utilità del lavoro in gruppi e la potenzialità di questa attività di essere inclusiva perché valorizza talenti solitamente inespressi nel contesto scolastico e perché utilizza il linguaggio delle immagini oltre che delle parole.

Capitolo 7. CONCLUSIONE (Chapter 7. CONCLUSION)

L'uso sia attivo (inteso come attività d'apprendimento) sia passivo (come fruizione di materiali generati con essa) della procedura di storificazione si è dimostrato efficace e utile a migliorare la competenza linguistica degli apprendenti di inglese.

Questa procedura è pensata come insieme di linee guida per permettere a chiunque di storificare concetti astratti. Quando utilizzata come tecnica didattica, apporta benefici non solo agli studenti ma anche agli insegnanti, a cui però chiede anche attiva collaborazione: è infatti l'insegnante che ha le competenze e la conoscenza necessaria a guidare gli studenti all'applicazione di queste linee guida che, proprio perché vogliono poter essere usate per la storificazione di qualunque concetto astratto, non possono farsi troppo specifiche, e quindi necessitano di un intervento di intermediazione da parte dell'insegnante per essere utilizzate efficacemente.

Bibliografia (References)

Appendici (Annexes)

Appendix 1.1 – Questionario singola storia (Story Questionnaire)

Appendix 1.2 – Questionario Generale (General Questionnaire)

Appendix 1.3 – Questionario di follow-up (Follow-up Questionnaire)

Appendix 1.4 – Test grammaticale (Grammar Test)

Appendix 2.1 – Presentazione per il primo incontro (Slides of the first meeting)

Appendix 2.2 – Tabella di lavoro con regola, errore, guida all'applicazione della procedura (Worksheet with rule, mistake, table to guide the procedure)

Appendix 2.3 – Presentazione per il primo incontro (Slides of the second meeting)

Appendix 2.4 – Template per la sceneggiatura (Script Templates)

Appendix 2.5 – Sommario della terminologia cinematografica (Summary of terminology)

Appendix 2.6 – Questionario per gli studenti della prima sperimentazione a scuola
(Questionnaire for the students of the first exploratory trial)

Appendix 2.7 – Questionario per gli studenti del laboratorio Grammar Story (Questionnaire
for the students of the Grammar Story workshop)